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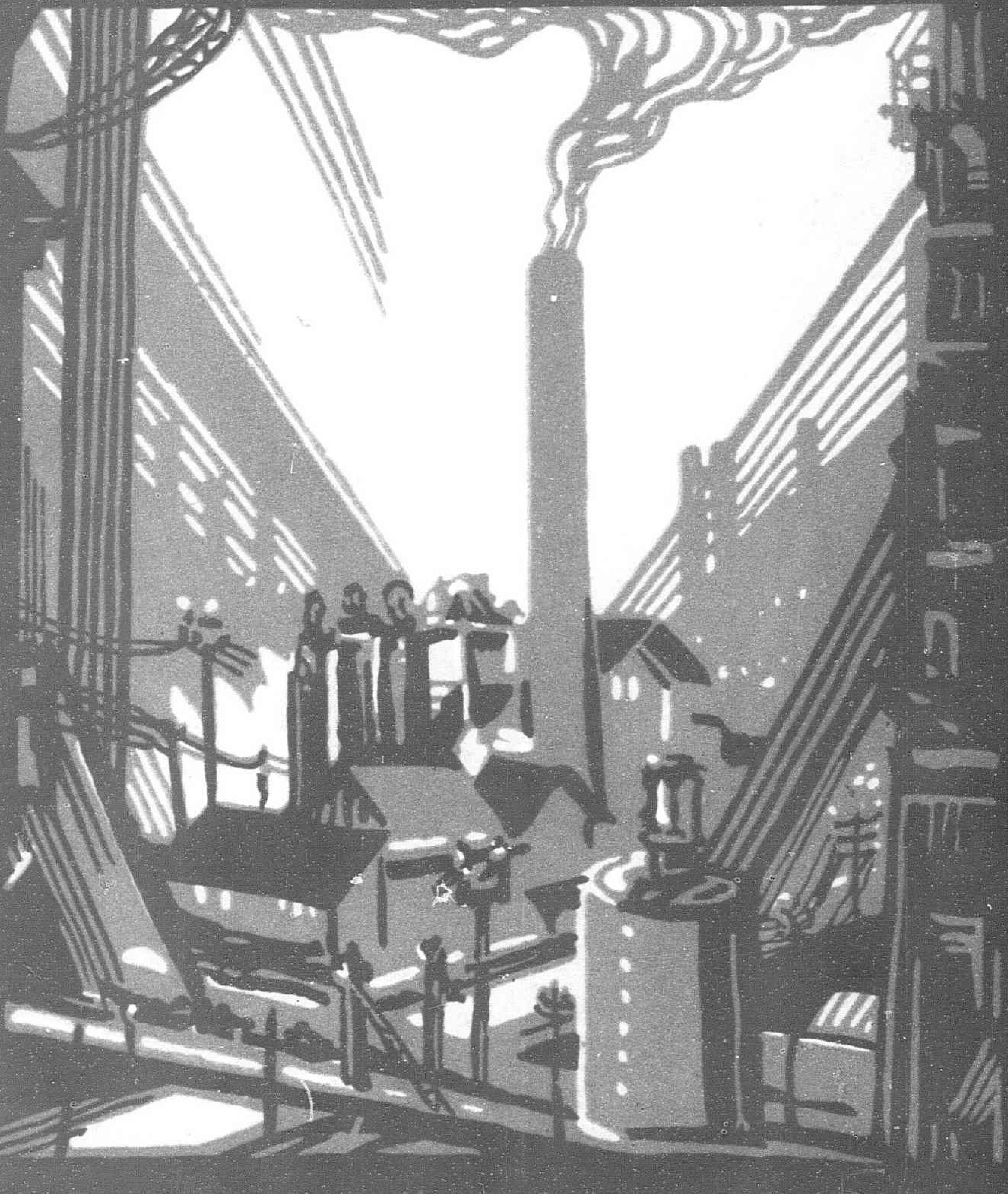
35TH YEAR OF PUBLICATION



上海黃浦灘念四號

遠東時報

AN AMERICAN LOOKS THROUGH THE OPEN DOOR

MR. WANG CHING-WEI'S PEACE MOVE

THE FINANCIAL STRUCTURE OF MANCHOUKUO

THE OPIUM PROBLEM

Vol. XXXV JANUARY, 1939 No. 1

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Vol. XXXV JANUARY, 1939 No. 1

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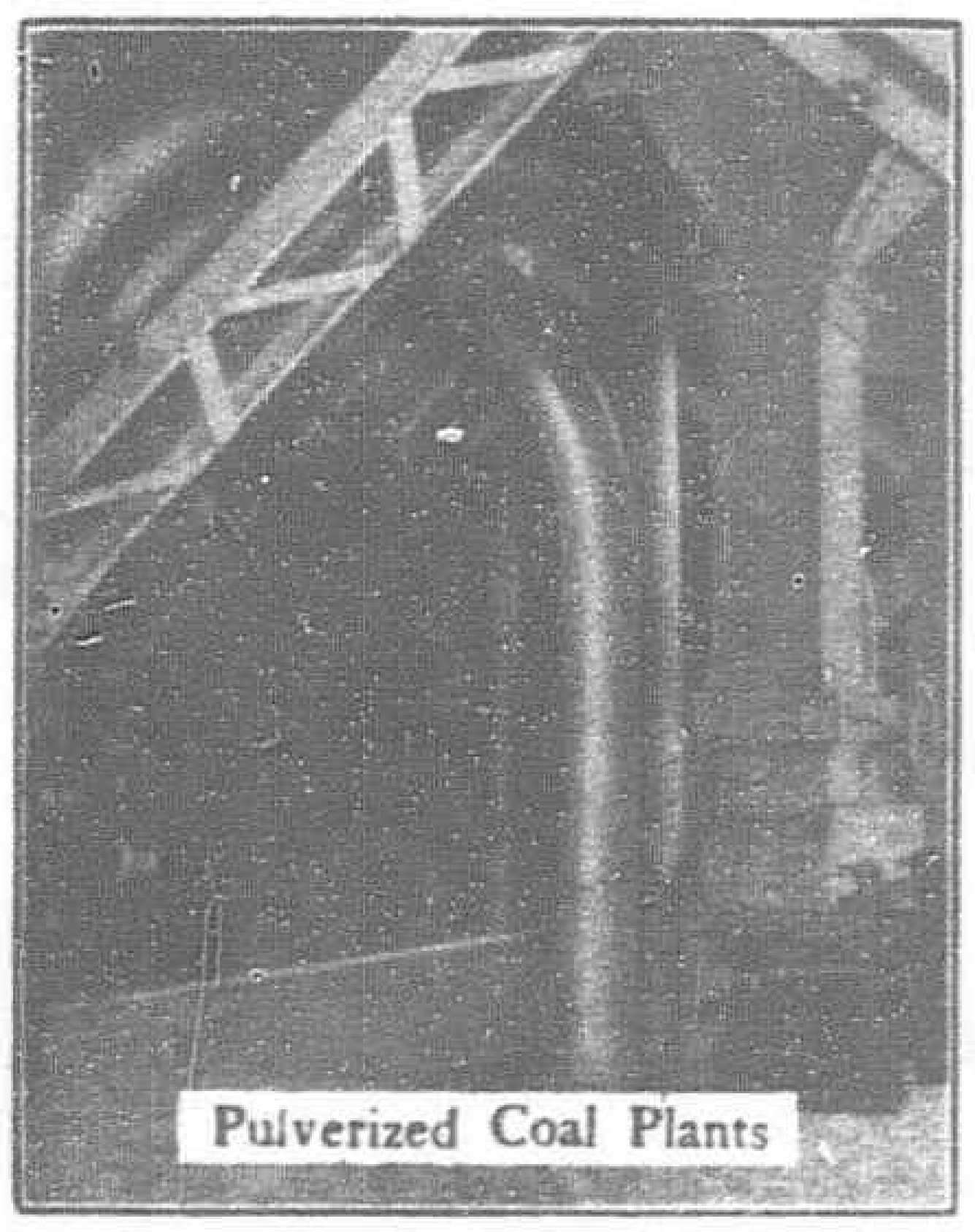
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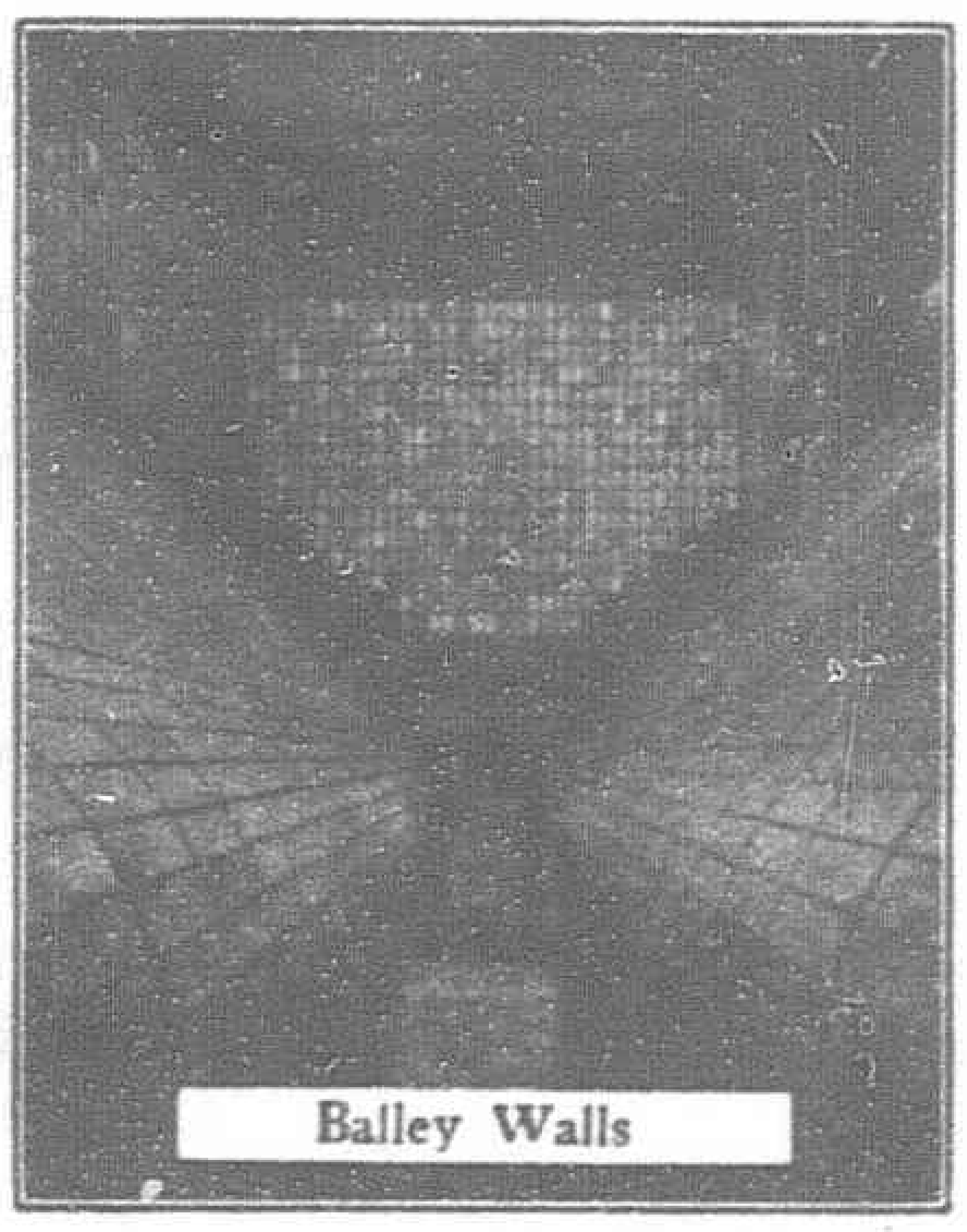
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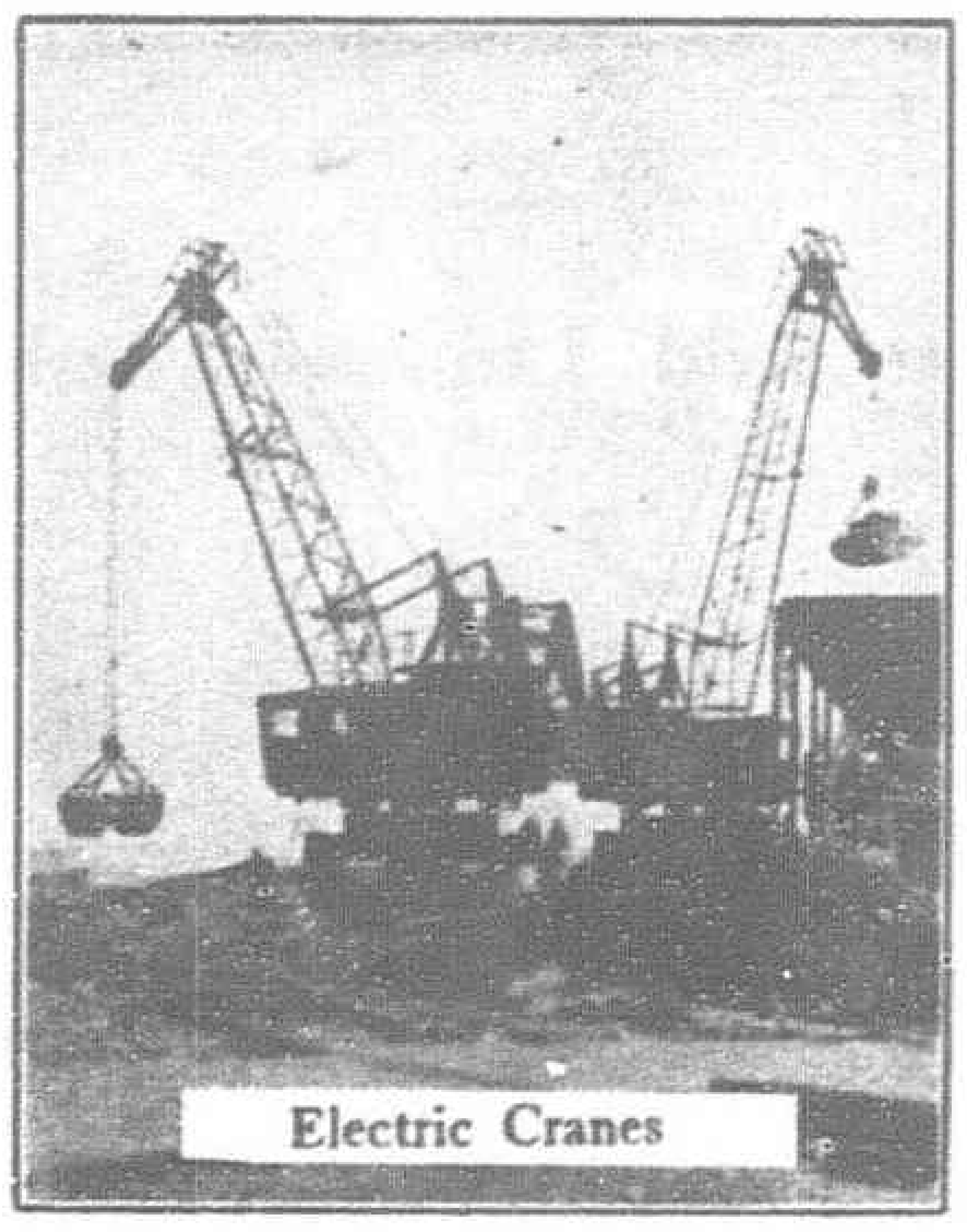
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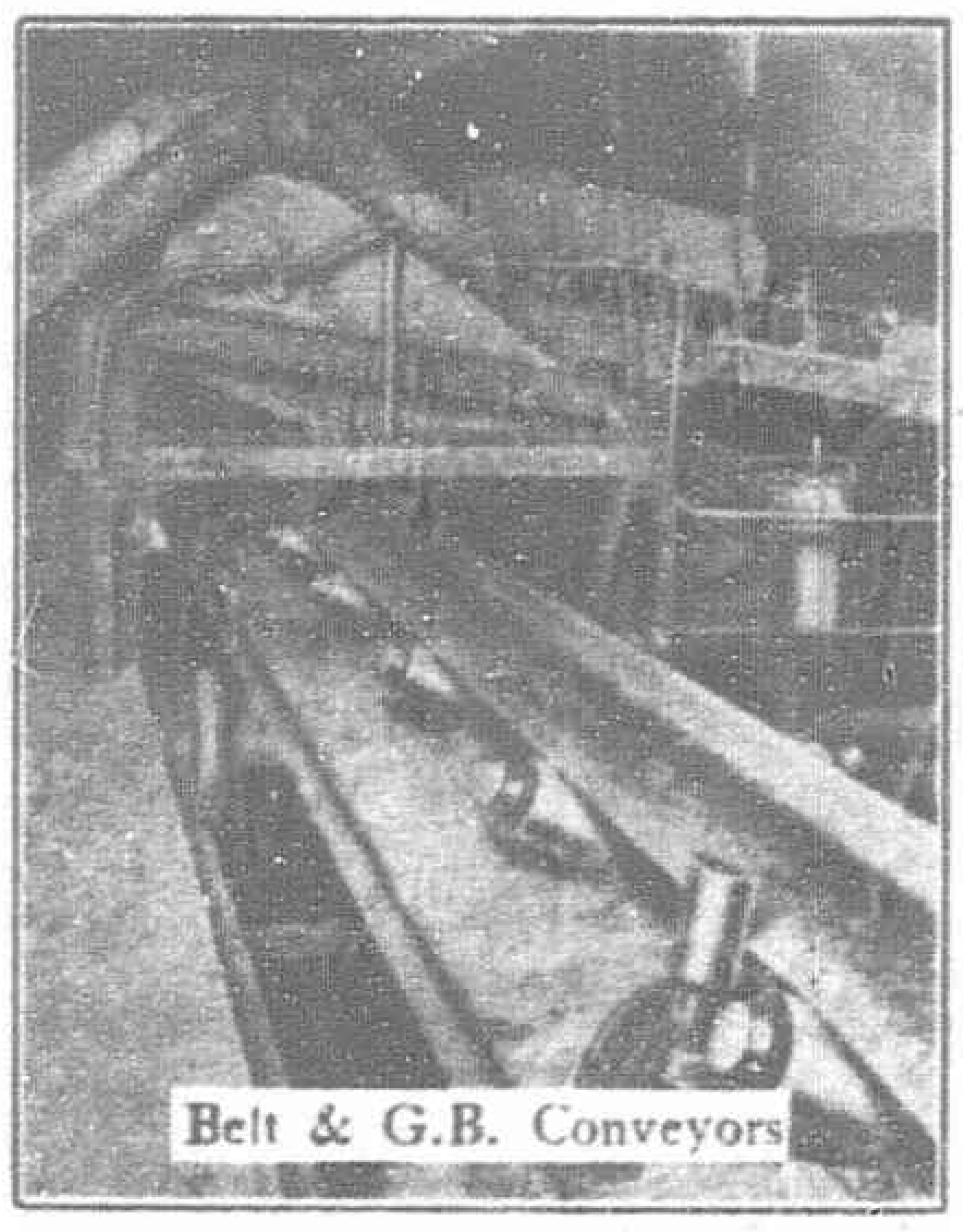
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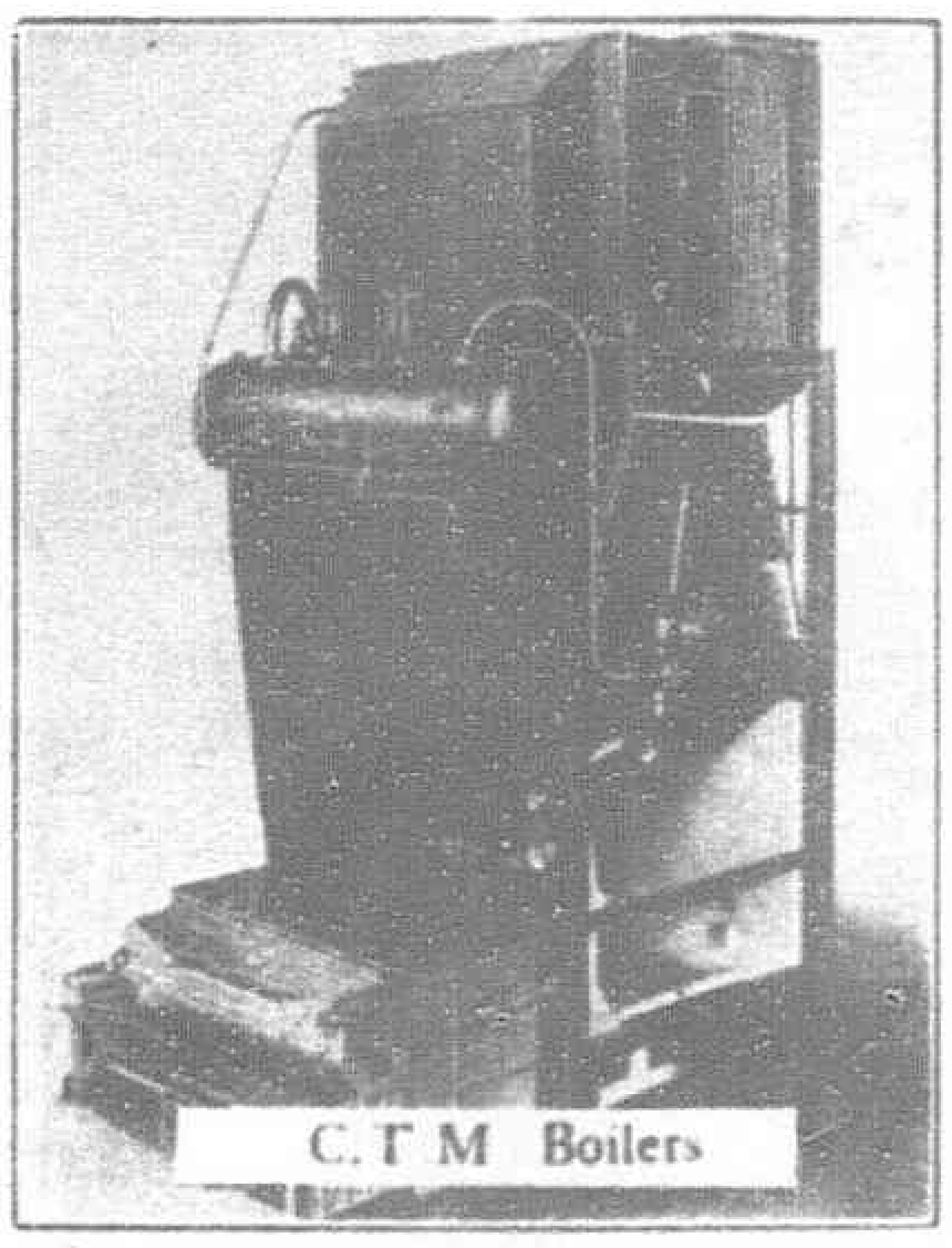
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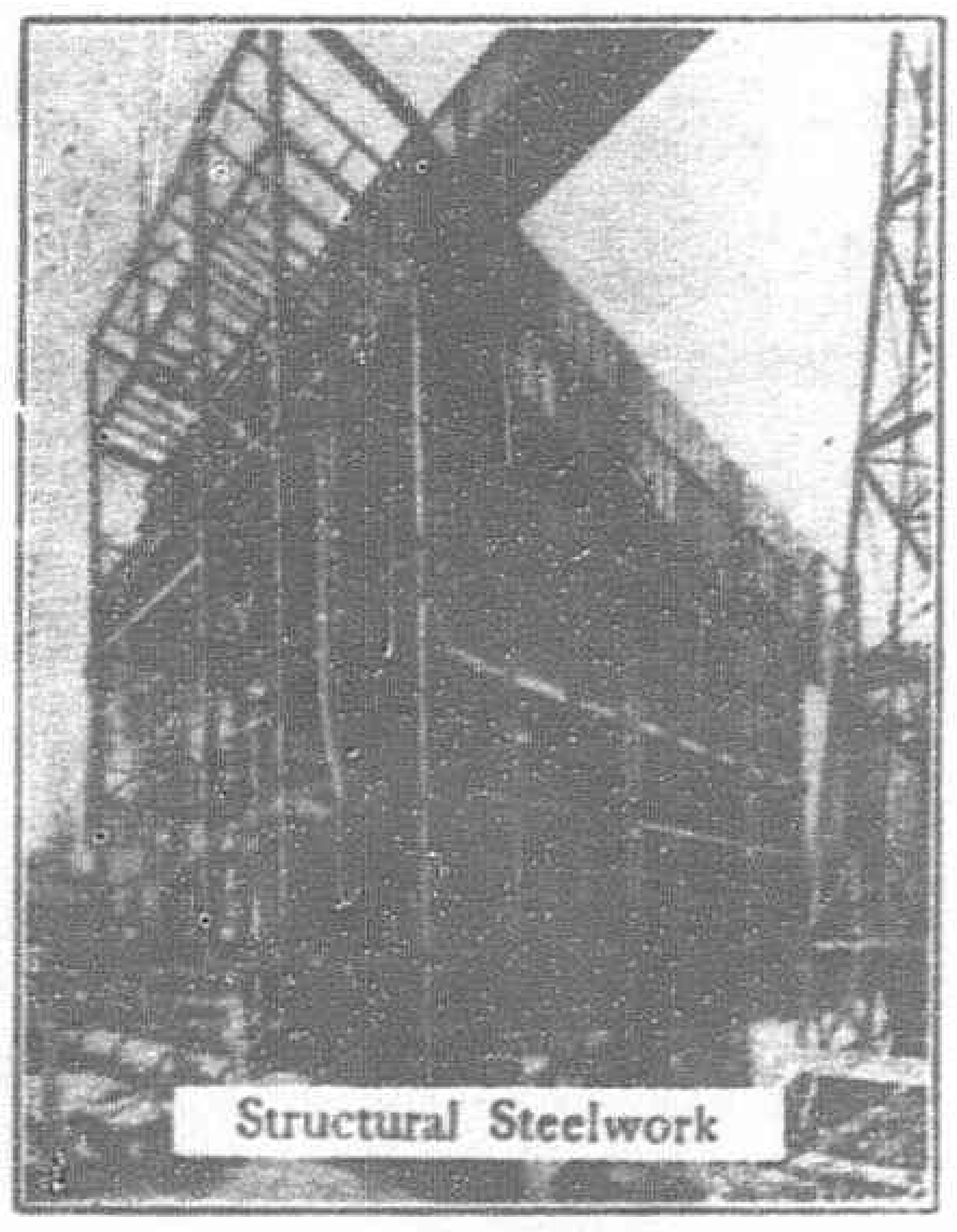
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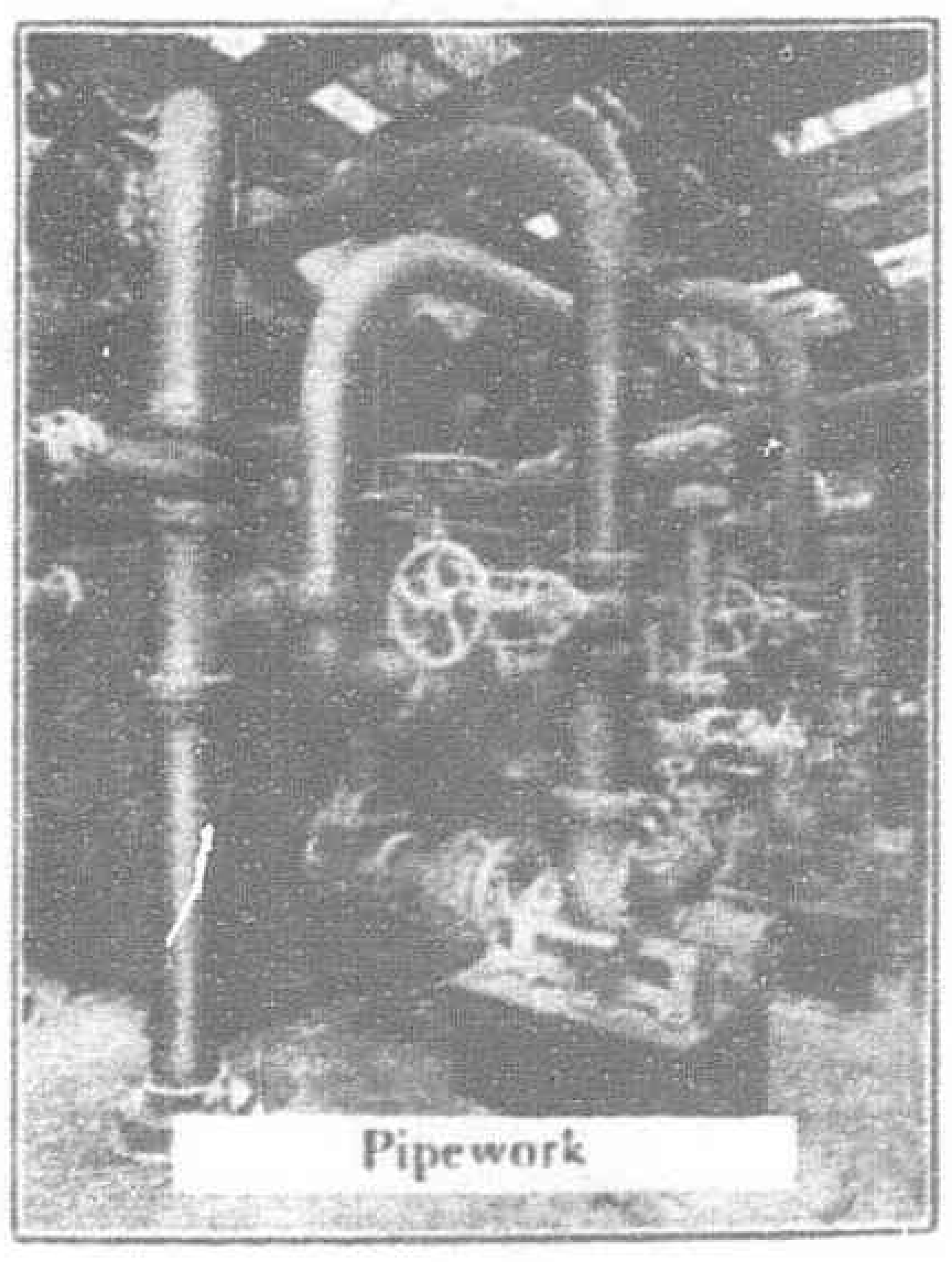
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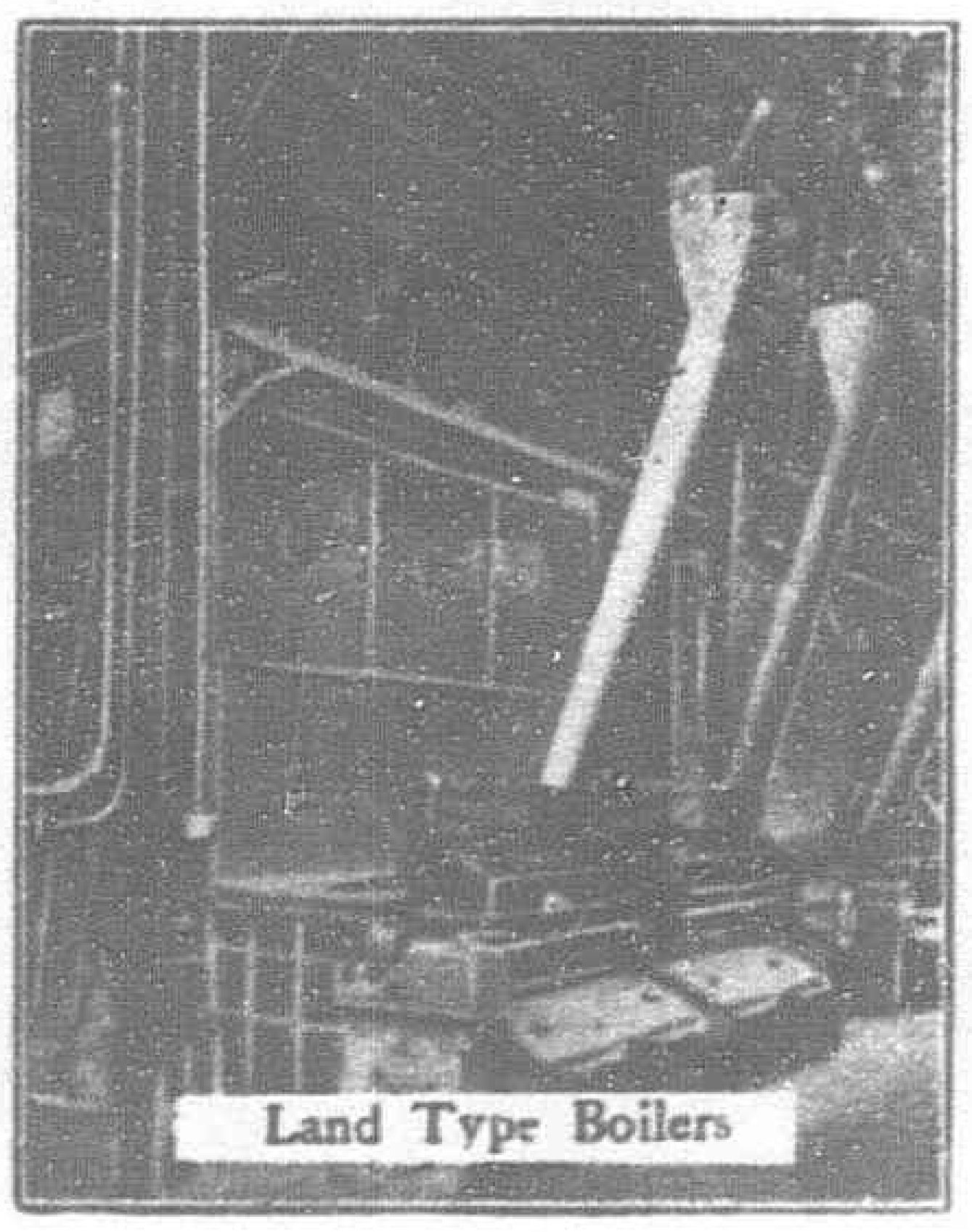
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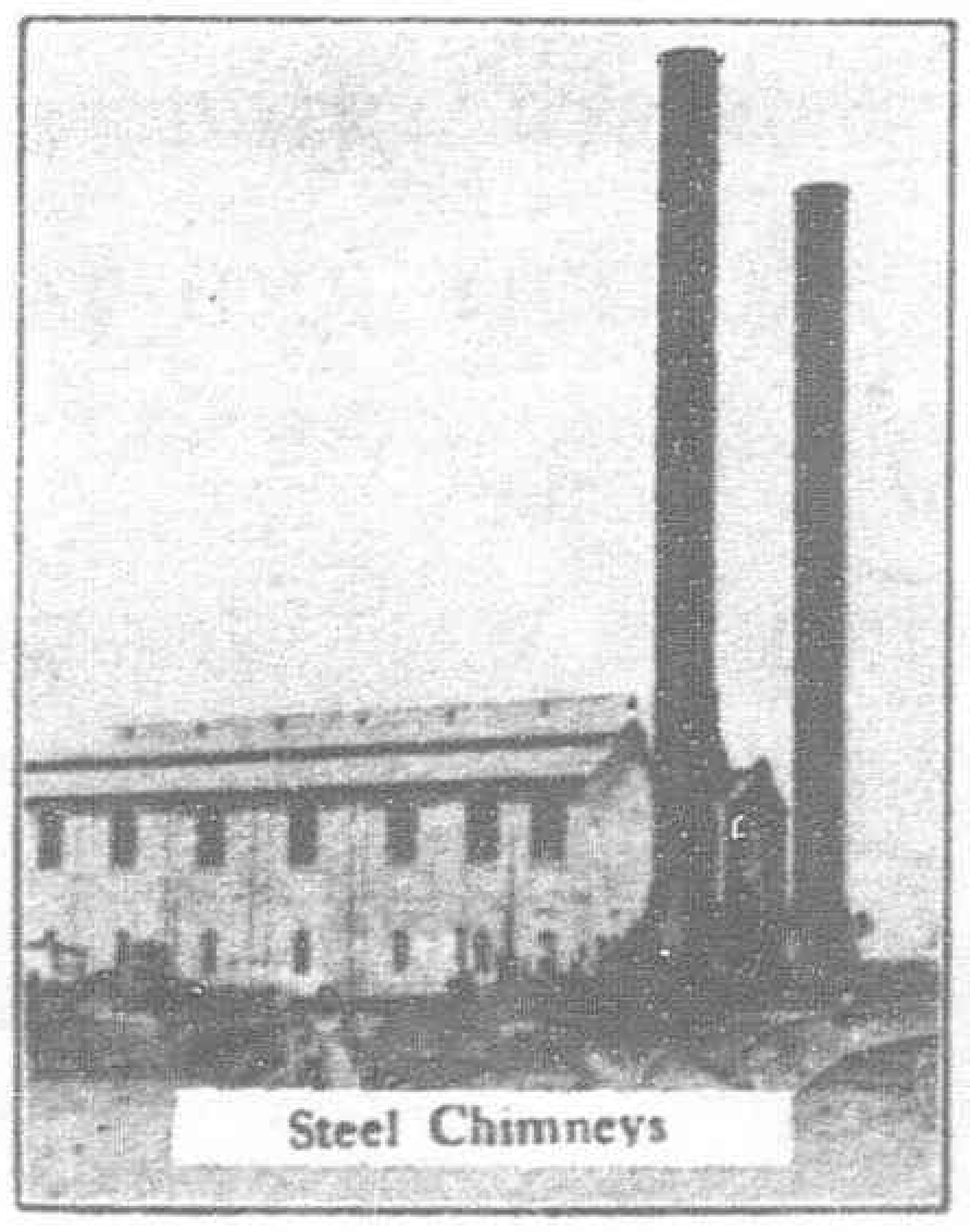
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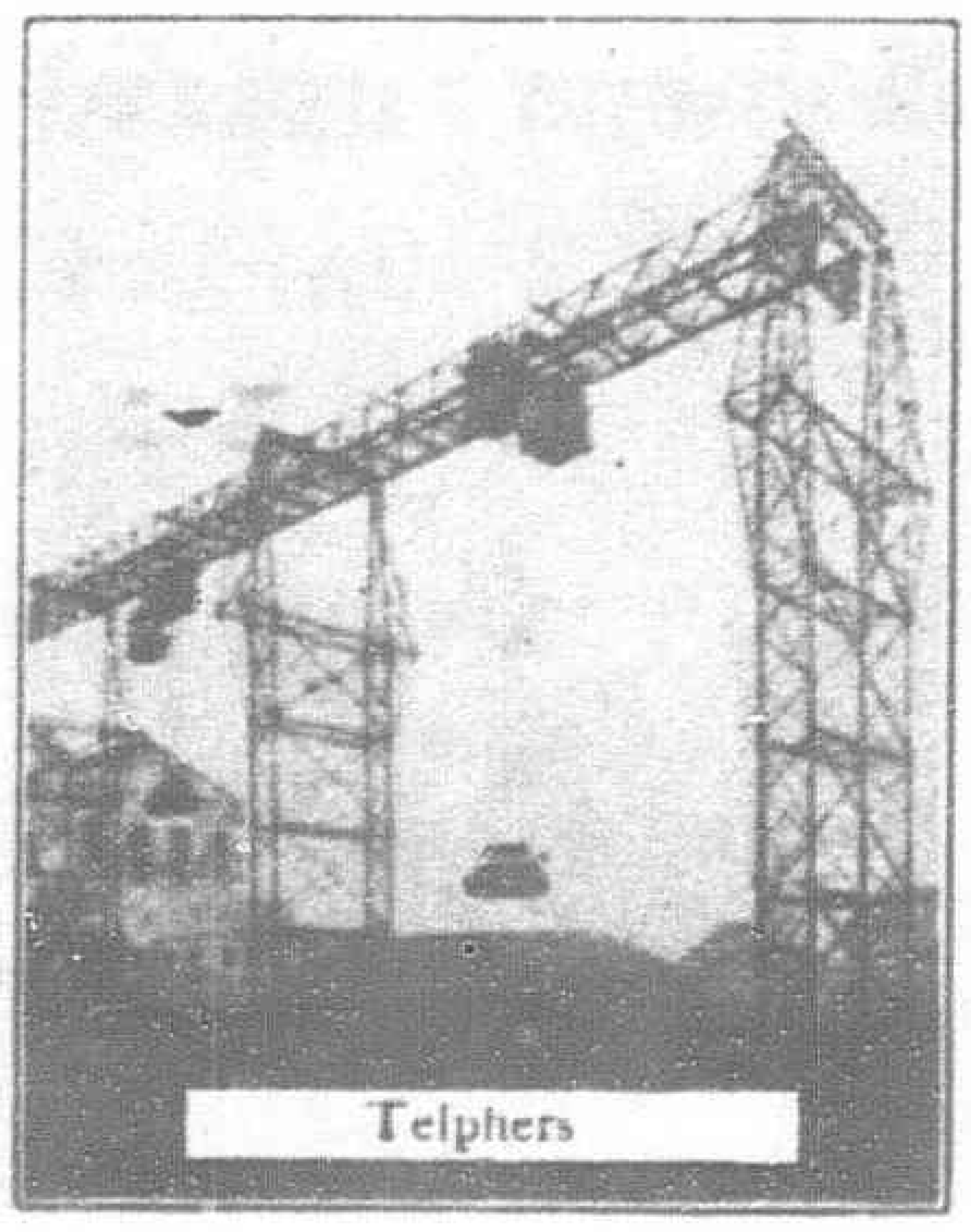
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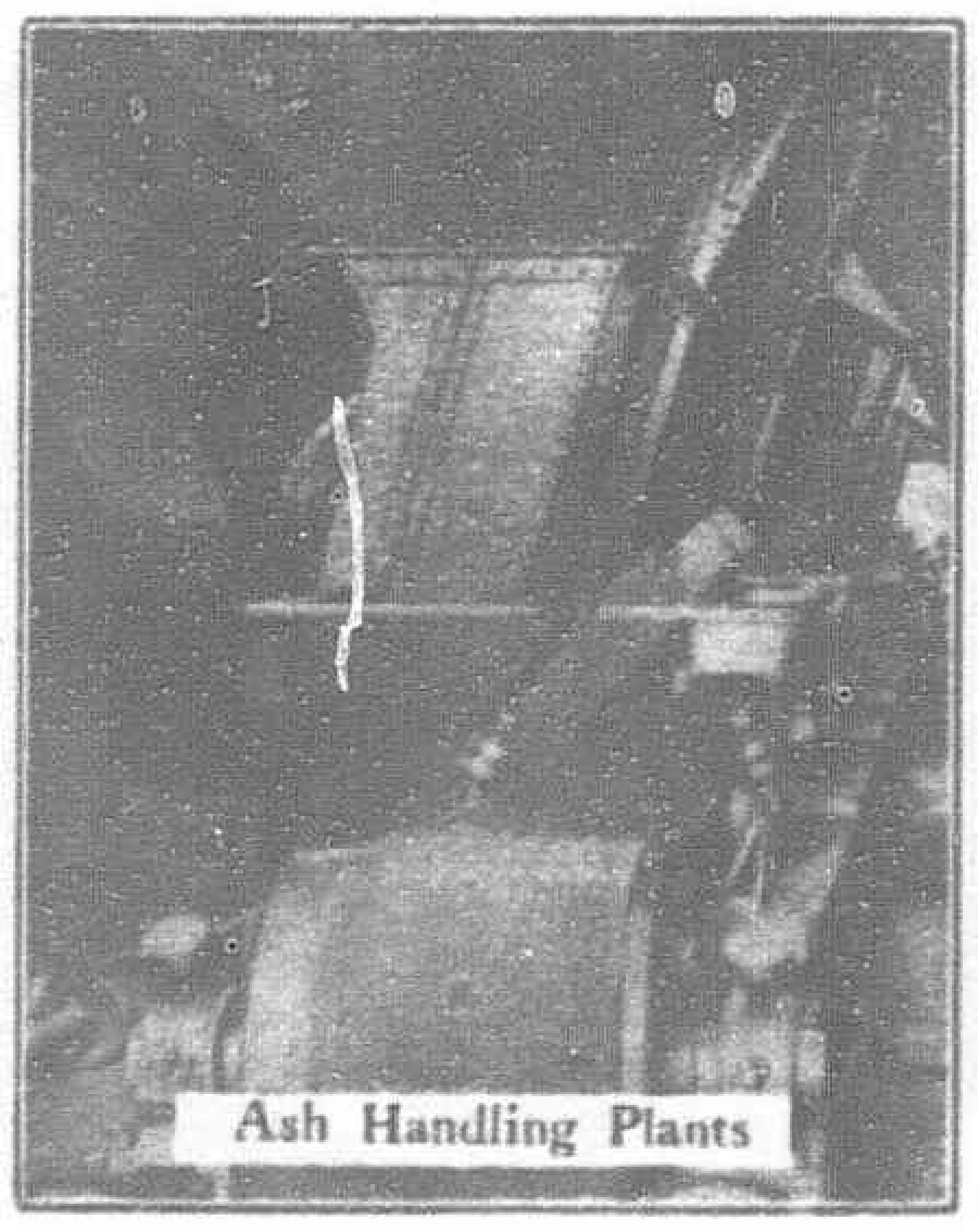
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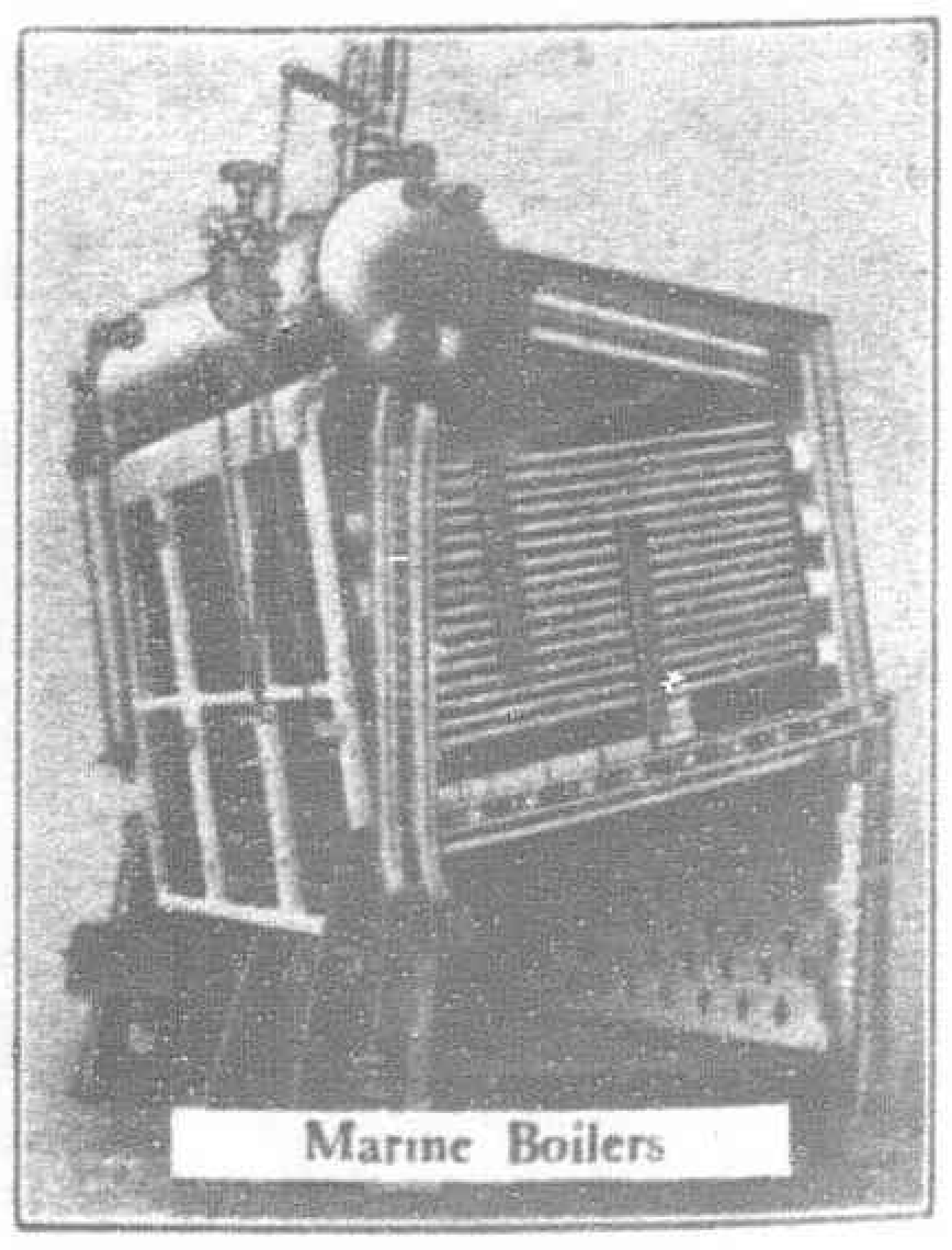
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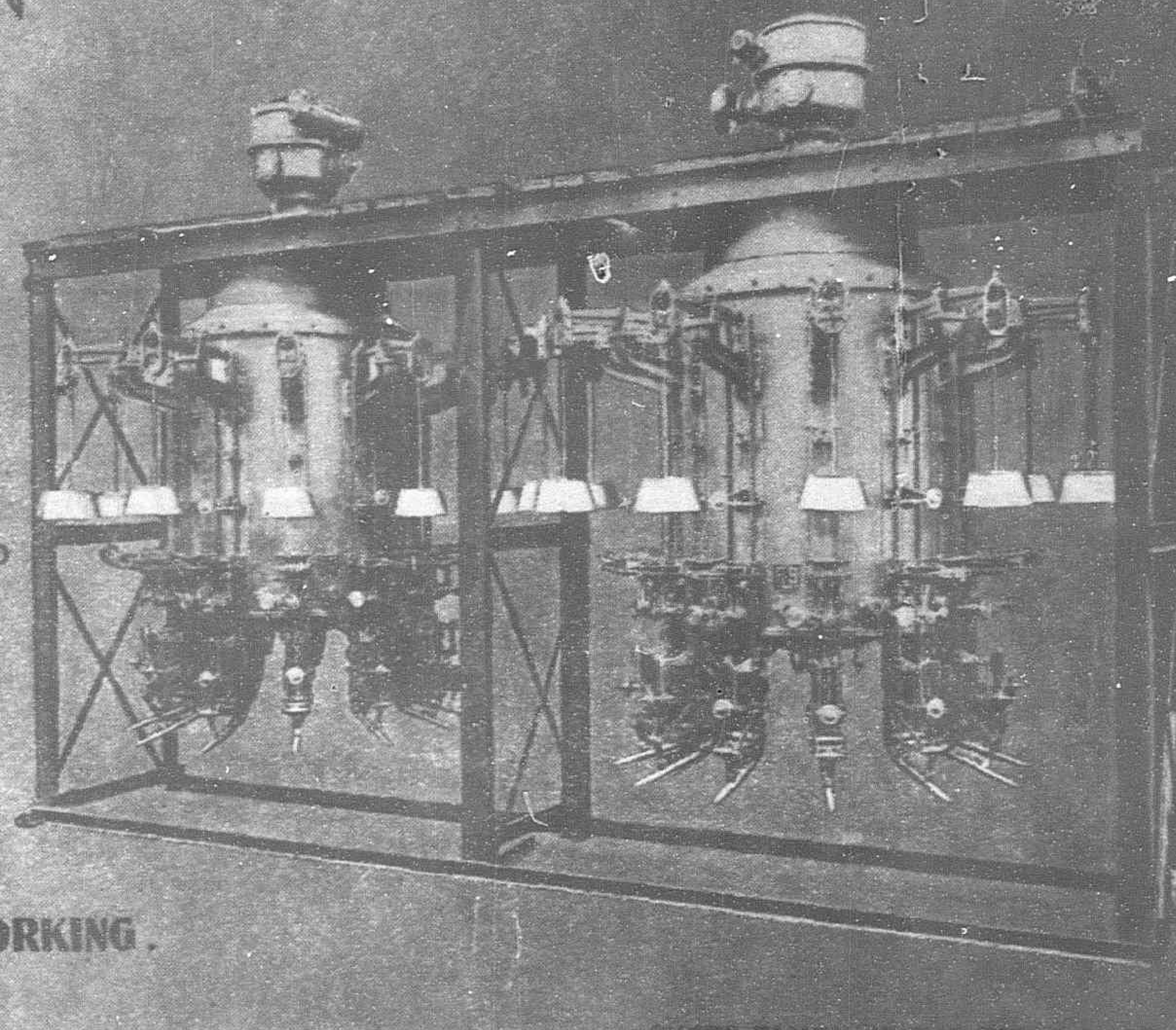

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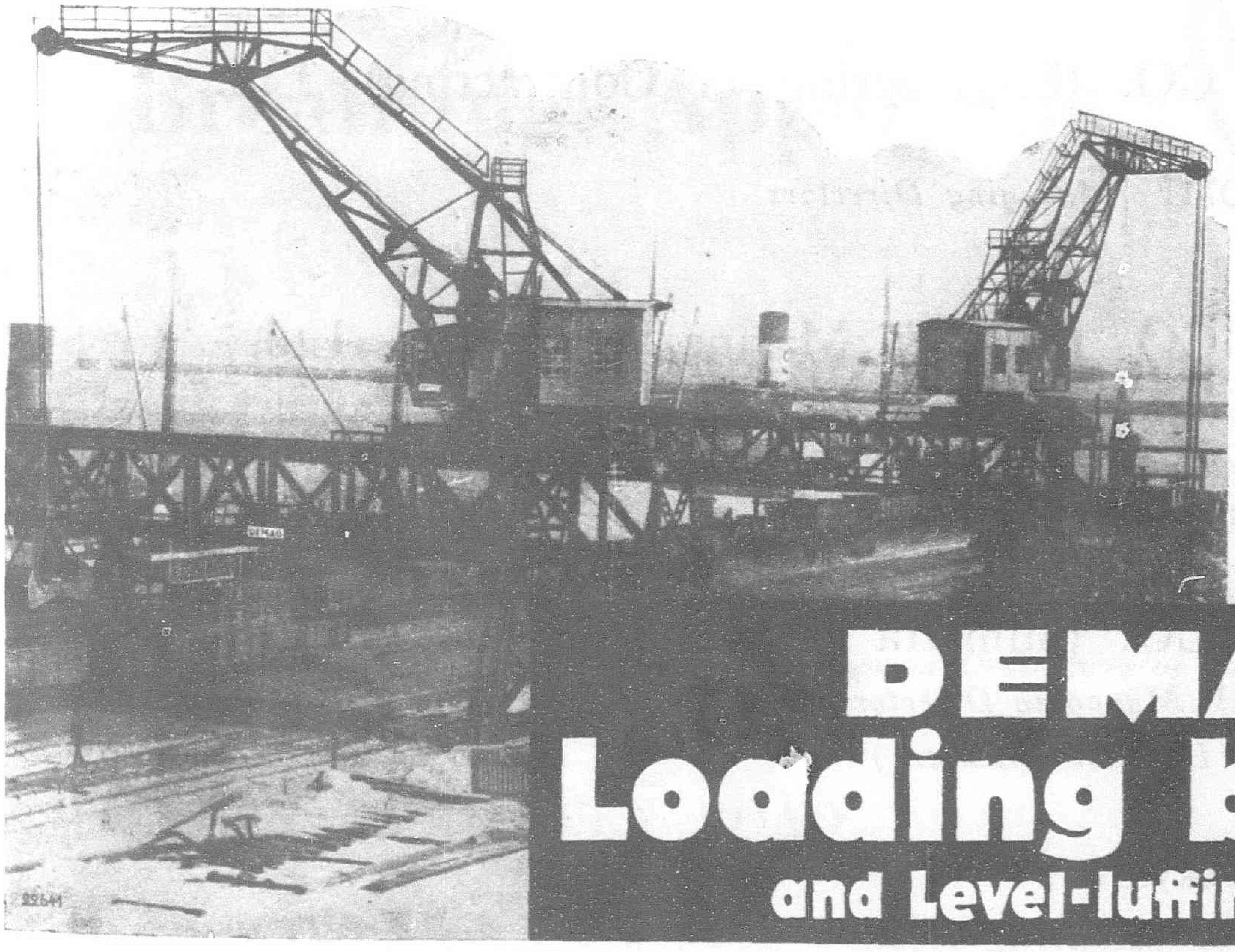

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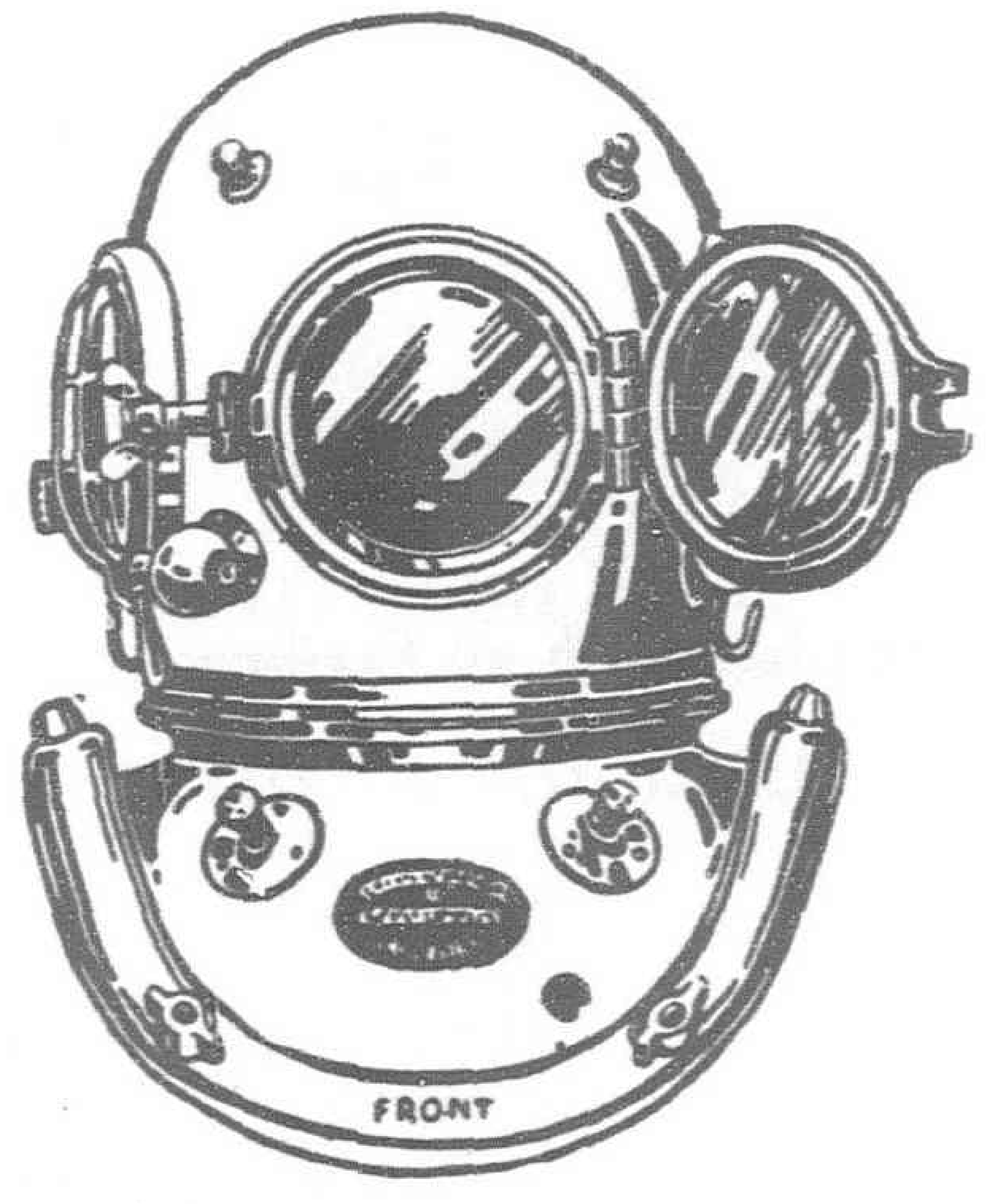

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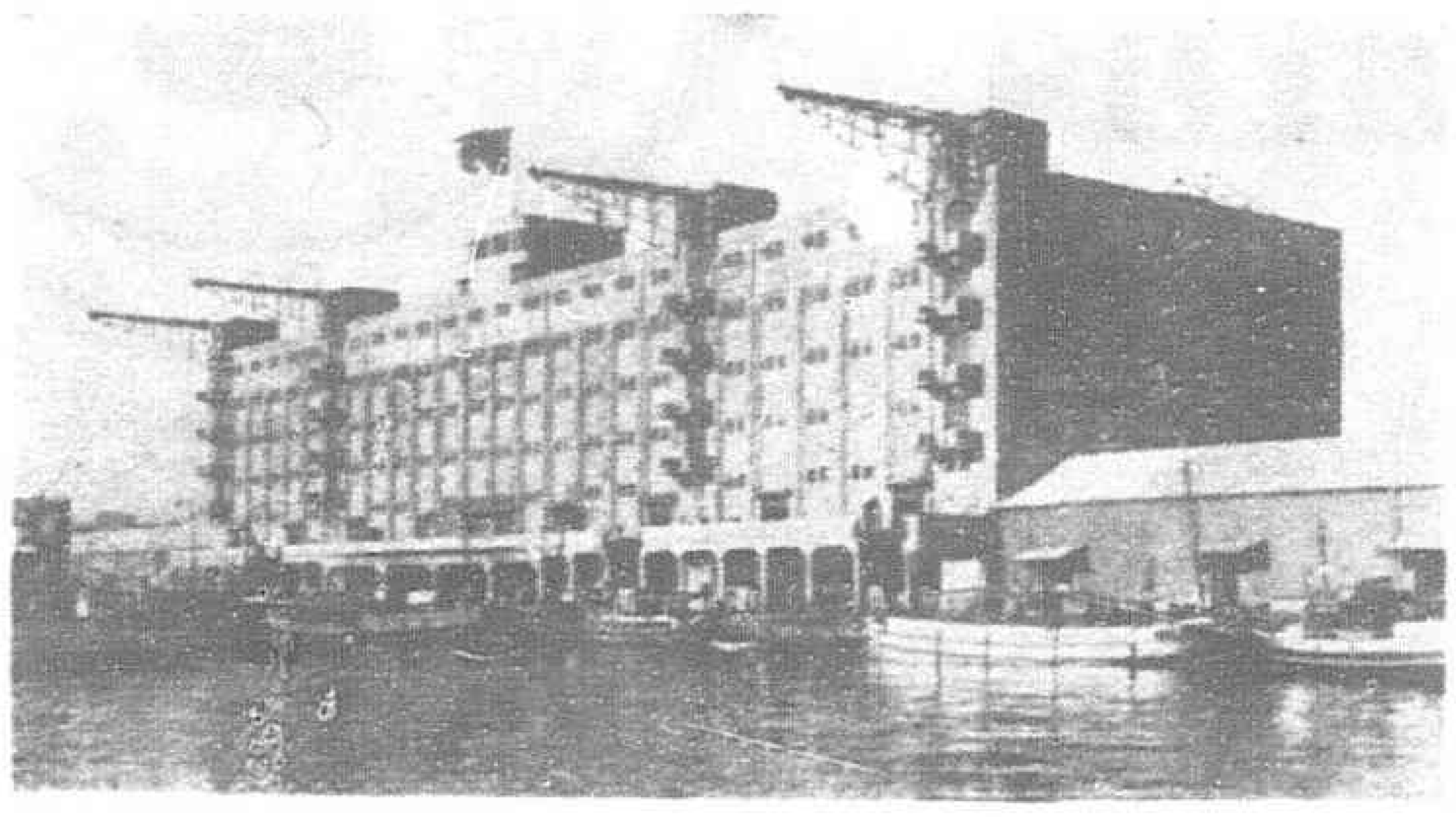

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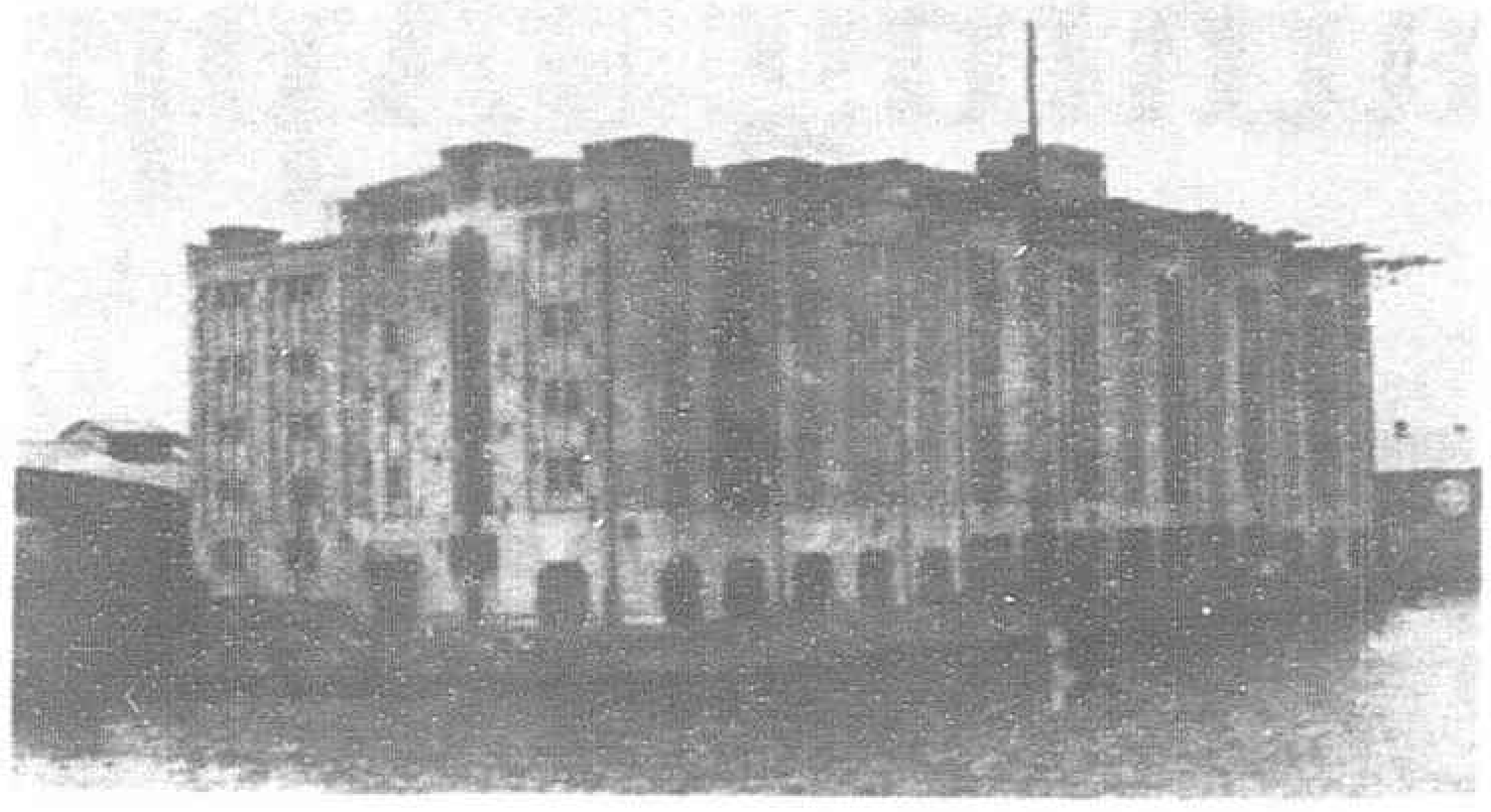

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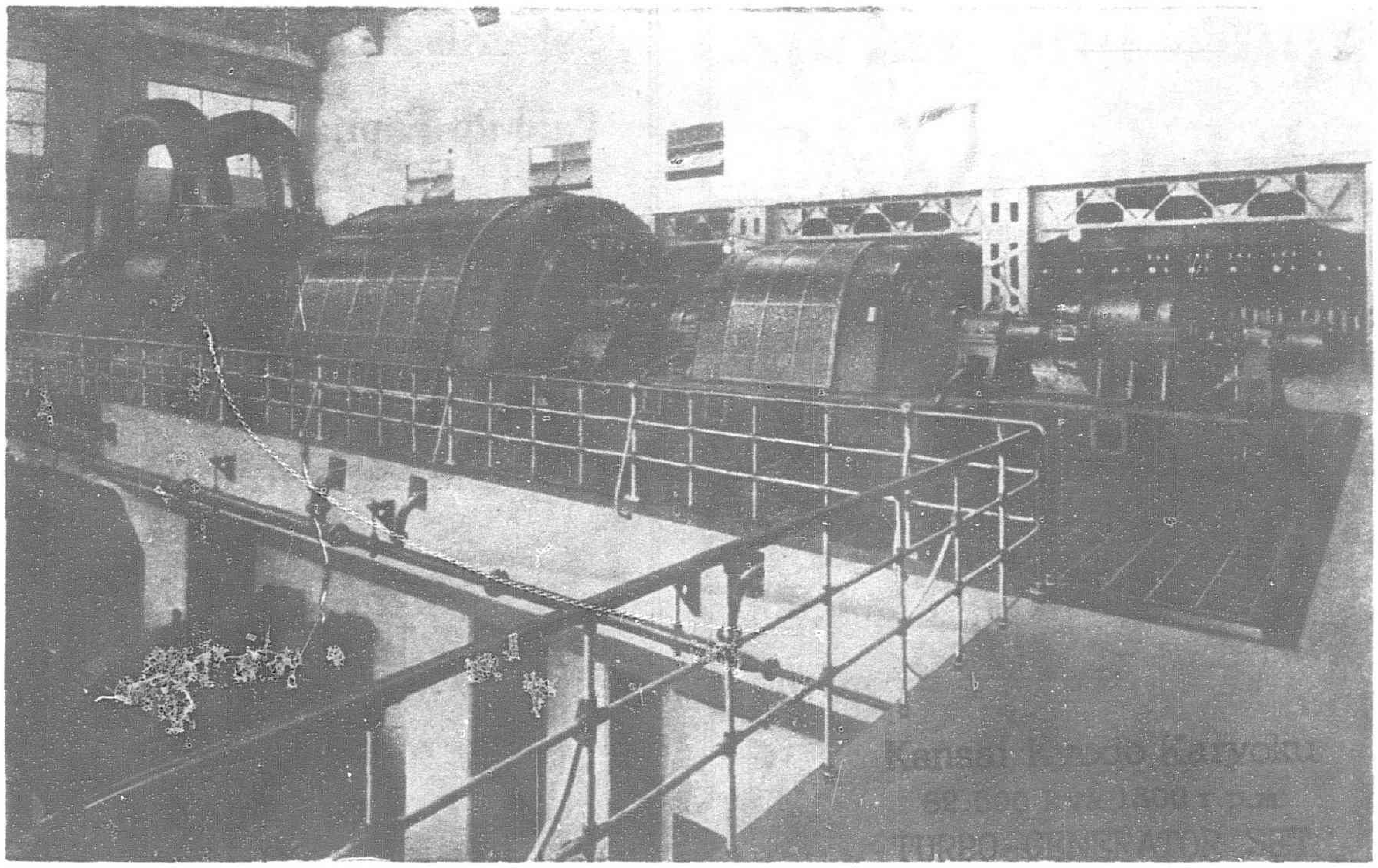

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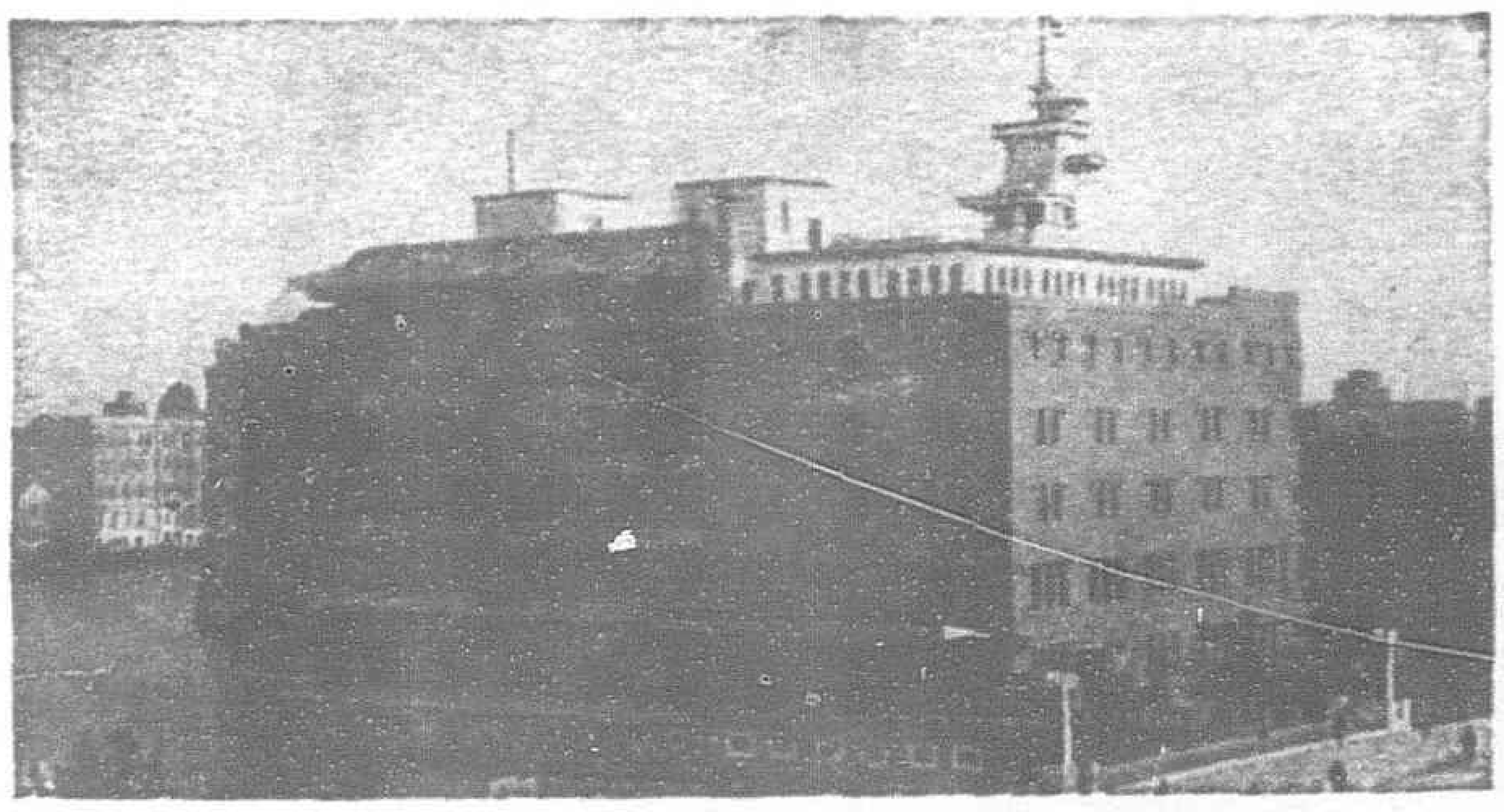
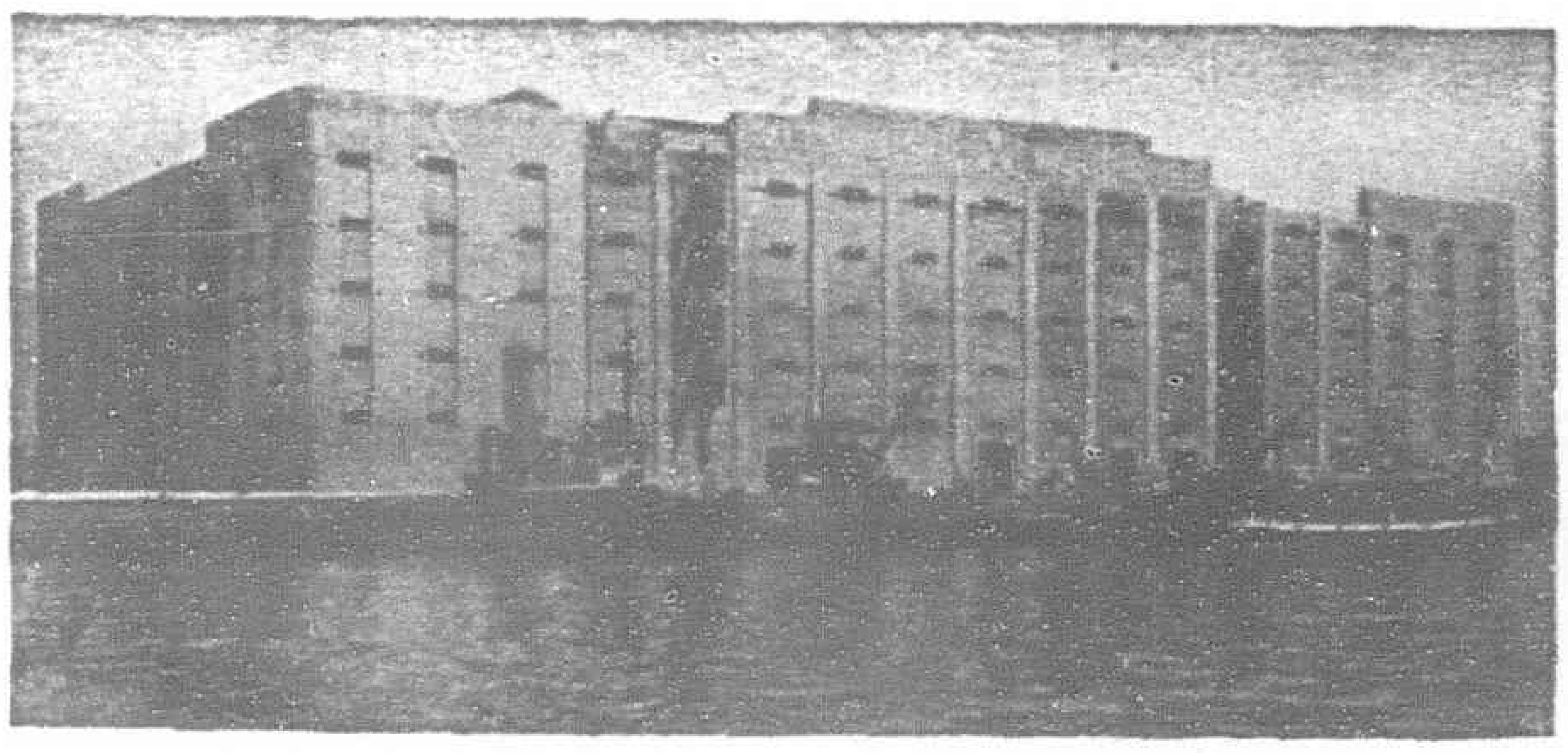


THE NEW WAREHOUSE AT EDOBASHI, TOKYO



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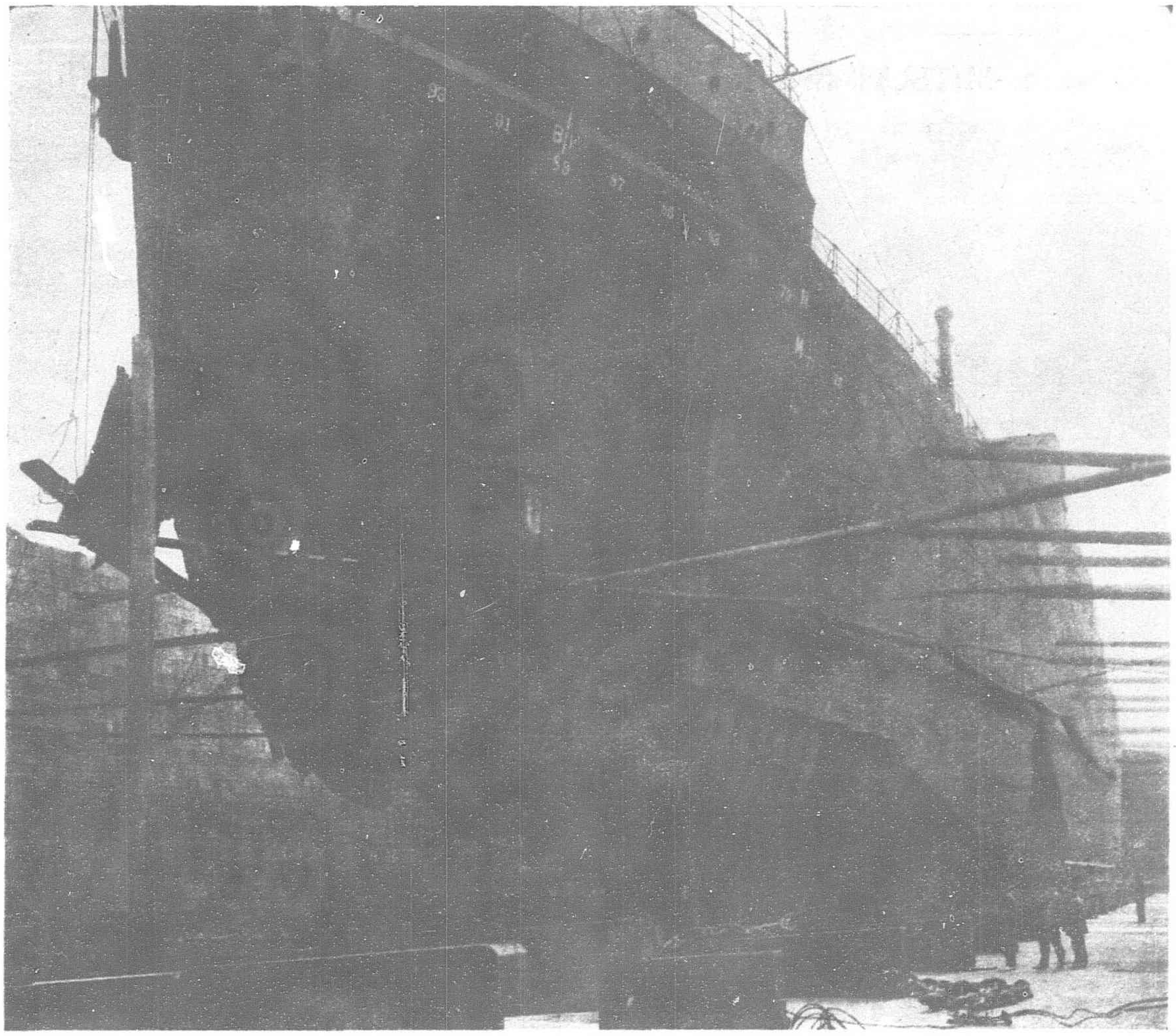

S.S. "Glenamoy" under repair at the Nagasaki Shipyard and Engine Works

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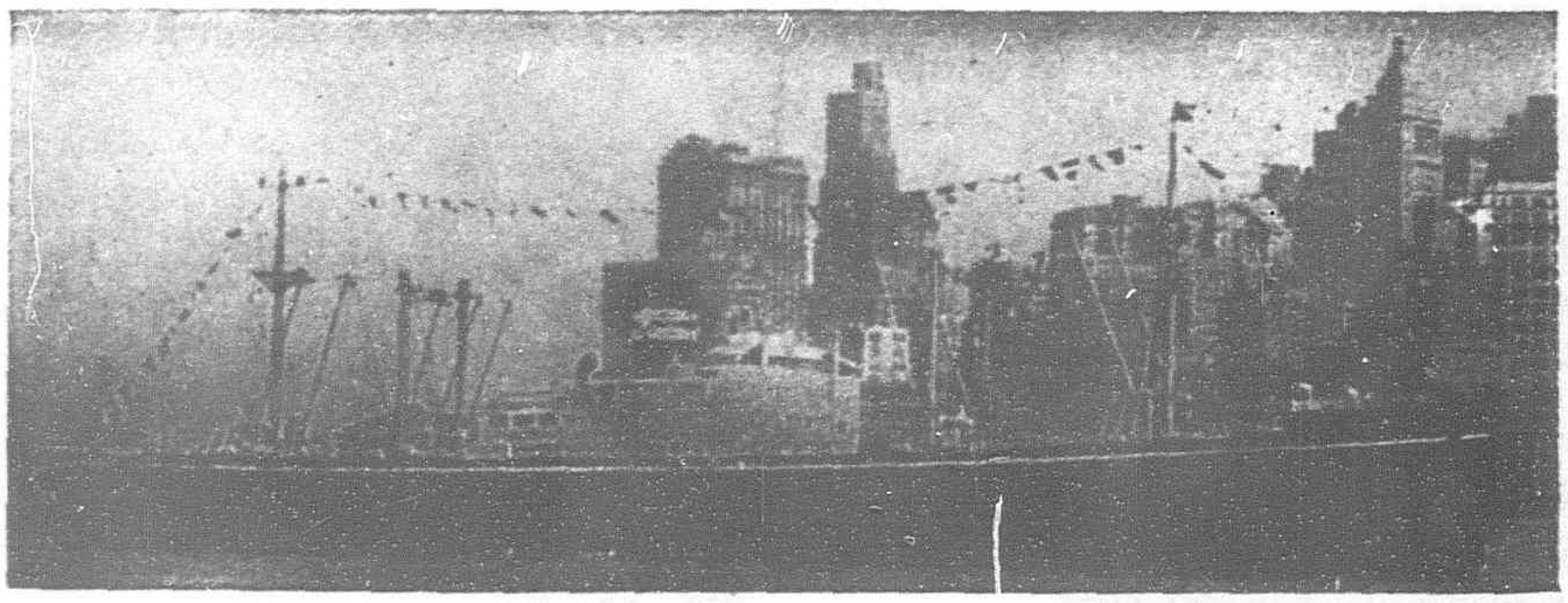

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New Zealand Line	*Monthly*	Philippine Line	*Fortnightly*

Chinese Service

Osaka-Tientsin Line	*7 times a Month*	Keelung-Foochow-Amoy Line	*3 times a Month*
Yokohama-Tientsin Line	*6 times a Month*	Keelung-Hongkong Line	*Weekly*
		Takao-Canton Line	*Fortnightly*

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SHANGHAI, HONGKONG, TIENTSIN, SWATOW, AMOY, CANTON, FOOCHOW, HANKOW, TSINGTAO AND CHEFOO

"N.C.D.N." of Shanghai Marches On

Circulation Increases in Spite of Hostilities; Facts for Readers and Advertisers

The circulation of the "North-China Daily News" has shown a steady rise month by month during the past year and for the month of December averaged an audited net paid total of 10,188 daily. Of this number no less than 8,500 are delivered direct by the "North-China Daily News" publisher to readers' homes and offices. The following figures indicate the steady rise in net paid circulation during 1938:—

First quarter, daily average		9,295
Second quarter	,,	9,451
Third quarter	,,	9,622
Fourth quarter	,,	10,116

These figures will naturally be of greatest interest to the advertiser as showing the steady and increasing support given by newspaper readers to China's largest English language newspaper. They are supported by monthly audited circulation statements prepared by Messrs. Thomson & Co., chartered accountants, which are available for reference by anyone interested in studying them.

Outcome of the Hostilities

In Shanghai itself the circulation is higher than it has ever been before, averaging for the past quarter 8,800 daily as against a previous high mark of 8,480. The outport circulation has naturally diminished owing to the exodus of such a large proportion of the English-reading population from the larger cities of China.

The volume of advertising, like that of every other newspaper, has been greatly affected by the prevailing depression, but the "North-China Daily News" still holds its predominant position as the best medium for the advertising of goods and service.

Cabled News Services from Abroad

The sales of the "North-China Daily News" have not been maintained by any artificial means, such as numerous daily editions or cut rates, nor by any sensational method of publicity. It is in the true field of journalism that the "North-China Daily News" has led the way since it was established seventy-five years ago. Its foreign news services include Reuters (British), United Press (American), Trans-Ocean (German), Havas (French), Domei (Japanese), Tass (U.S.S.R.); and the principal Chinese news services until the hostilities caused a discontinuance of them. In addition to these it carries a special and exclusive London service of general news, and exclusive commercial and financial cables.

Distinguished Writers and Correspondents

Adequate news of political, social and economic events in the ports and the interior of China comes from the "North-China Daily News" and "North-China Herald" staff of correspondents, of which there are no less than 46, principally of British and American nationality. Among them are or have been numbered Dr. Arthur Smith, Mr. W. H. Donald, Dr. Darroch, Mr. Rodney Gilbert, Mr. Frank H. Hedges, Mr. R. Cunningham ("Tibetan"), H.E. Quo Tai-chi (Ambassador to Great Britain), Dr. J. C. Ferguson, the late Mme La Rue (Juliet Bredon), Dr. Hu Shih (Ambassador to the United States), Père Gherzi, Dr. Wu Lien-teh, the Rev. G. G. Warren, and other distinguished writers.

During recent years, newspaper illustration has advanced by leaps and bounds. In developing this new feature, in addition to the "North-China Daily News" own photographic staff covering China events, it also has British and American photographic services.

"North-China Daily News" Features

Of more local interest may be mentioned Sapajou's cartoons, which have been extensively reproduced by the British and American press; the full shipping information gathered daily; the sport and amusement sections; and "Letters to the Editor," which indicate the general readers' choice of a newspaper in which to make public his opinions, his grievances and his commendations.

It has been said that the most valuable page in the "North-China Daily News" is the front page, which is devoted entirely to advertising; certainly no reader can afford to miss it, with its coming events, government, customs, municipal, and public notices. The classified advertisement page, however, is a good gauge of the readers' choice of a newspaper, and there is no other in China which deals with such a mass of small ads—averaging for the year 1938 more than 4,000 a month. As for trade and general advertisements, there are few indeed which are published in any newspaper which do not appear in the "North-China Daily News."

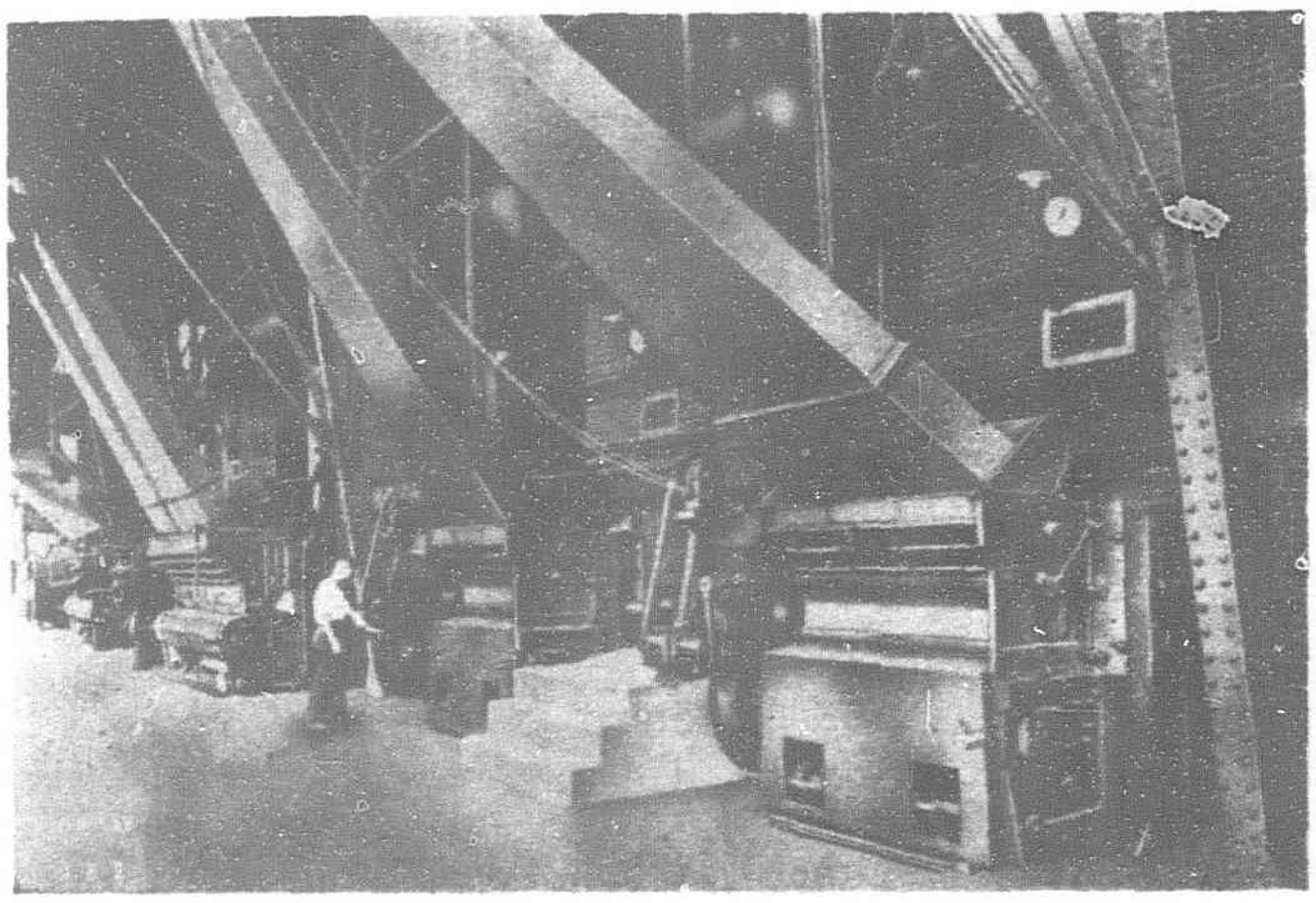
It is in these things that the strength of the "North-China Daily News" lies. Its unique hold upon the best minds of the country and the deserved reputation of its news columns and special features explain its ability to pass almost unscathed through the depression resulting from the long-drawn-out hostilities. They explain why the "North-China Daily News" to-day is the most powerful advertising medium in China.

ESTABLISHED
1896

TOKYO & OSAKA
JAPAN

KISYA SEIZO KAISYA

STEAM ENGINEERING AND ROLLING STOCK MFG., CO., LTD.



PATENT WATER TUBE BOILER WITH PATENT K. S. K. STOKER

HEAD OFFICE:

No. 366-368 MARUNOUTI BLG.
KOZIMATI-KU, TOKYO

WORKS:

OSAKA WORKS:

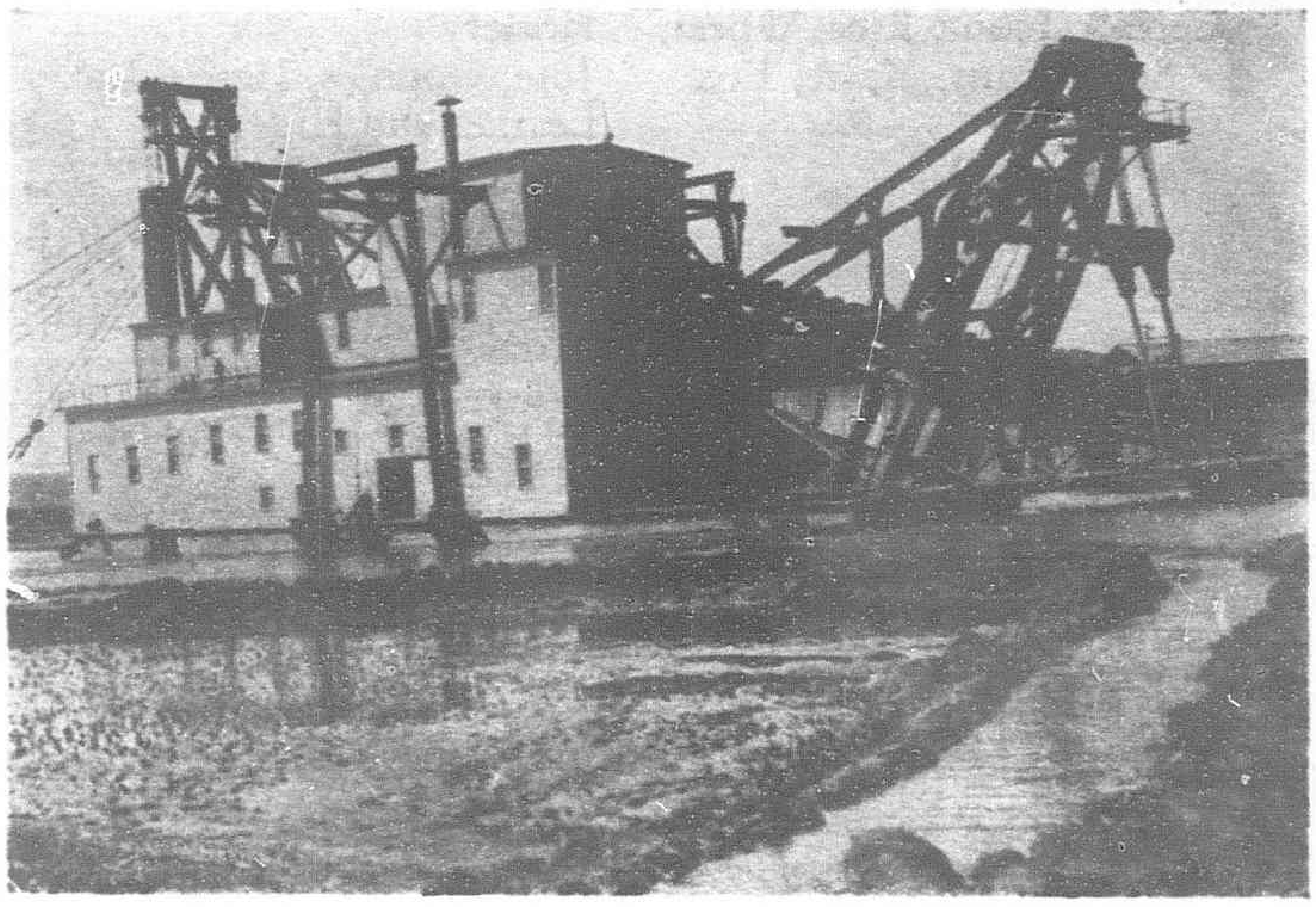
SIMAYA-TYO KONOHANA-KU, OSAKA

TOKYO WORKS:

MINAMISUNA-MATI ZYOTO-KU, TOKYO

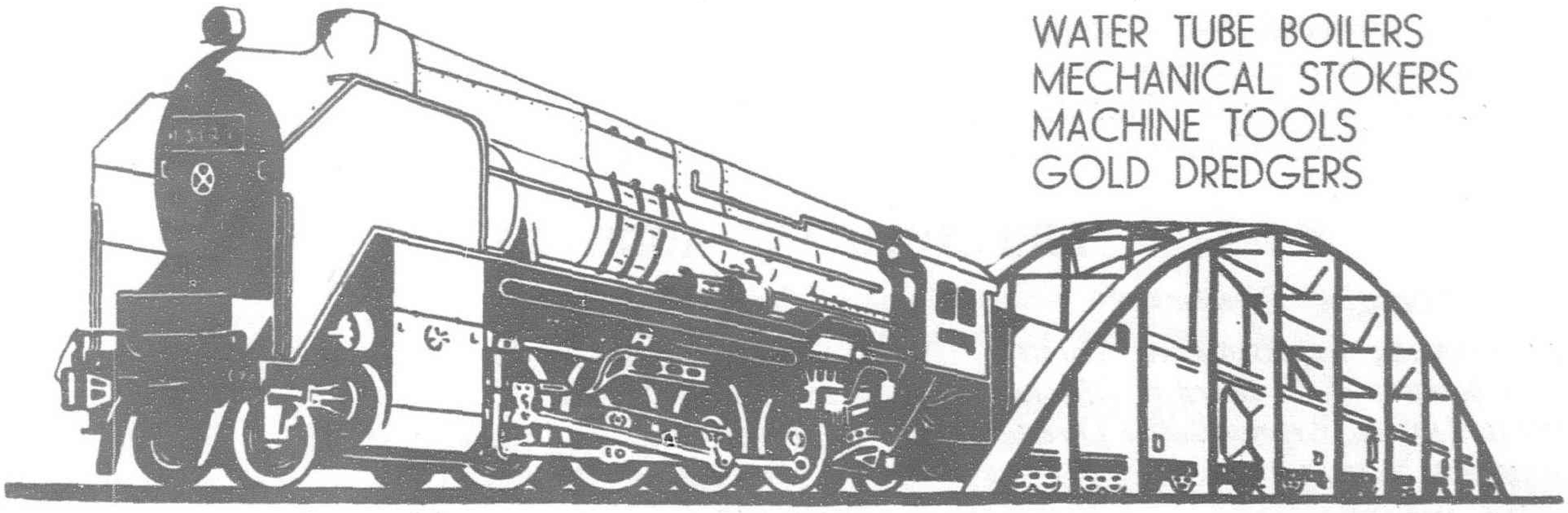
MANUFACTURERS OF:

STEAM LOCOMOTIVES
ELECTRIC, GASOLINE AND DIESEL LOCOMOTIVES
PASSENGER AND FREIGHT CARS
BUS BODIES
STEEL BRIDGES
STRUCTURAL WORK
STEEL SASHES AND DOORS



10 CUBIC FEET GOLD DREDGER

WATER TUBE BOILERS
MECHANICAL STOKERS
MACHINE TOOLS
GOLD DREDGERS



Capital Y. 150,000,000

Reserve Funds (March 1937):
Y. 82,400,000

MITSUI & CO., LTD.

(MITSUI BUSSAN KAISHA, LTD.)

Established: 1876 Cable Address: "MITSUI"

General Exporters and Importers, Insurance and Ship Agents, Shipowners, Shipbuilders, Sawmill Owners and Wharfingers

Head Office: TOKYO, JAPAN

PRINCIPAL LINES OF BUSINESS:

Automobiles
Airplanes
Beer
Building Materials
Cotton Piece Goods
Camphor
Cement
Cereals, Flour, Rice, Wheat, Soya Beans, Maize, Etc.
Coal
Drugs and Chemicals
Dyestuffs
Fertilizers, Nitrate of Soda, Sulphate of Ammonia, Phosphate Rock, Bean Cake, Etc.
Ginseng
Hosiery
Jute, Gunnies, Hemp, Etc.
Leather and Hides
Lumber, Oak, Birch, Plywood, Teak, Etc.
Matches
Marine Products
Metals, Copper, Iron, Steel, White Metals, Etc.
Machinery, Rails and Other Railroad Equipment
Paper, Pulp, Petroleum
Rayon, Rayon Piece Goods
Salt
Soap
Silk, Raw Silk and Tissues
Sugar
Tobacco
Tea
Wool, Tops, Woollen Yarns and Piece Goods, Etc.

BRANCH OFFICES AND REPRESENTATIVES:

HOME—Otaru, Hakodate, Niigata, Kawasaki, Yokohama, Yokosuka, Shimizu, Nagoya, Osaka, Maizuru, Kobe, Okayama, Tama, Hiroshima, Kure, Moji, Wakamatsu, Karatsu, Miike, Nagasaki, Saseho, Taihoku, Keelung, Takao, Keijo, Fusan, Heijo, Seishin, Etc.

ABROAD—Dairen, Antung, Newchwang (Yingkow), Mukden, Hsinking, Harbin, Tsitsihar, Botanko, Tomon, Tientsin, Peiping, Tsingtao, Chefoo, Tsinan, Shanghai, Nanking, Hankow, Amoy, Canton, Hongkong, Saigon, Manila, Cebu, Davao, Iloilo, Sydney, Melbourne, Singapore, Medan, Palembang, Bangkok, Sourabaya, Semarang, Batavia, Calcutta, Rangoon, Bombay, Karachi, Madras, Teheran, Kabul, London, Vienna, Alexandria, Casablanca, New York, San Francisco, and Seattle.

CORRESPONDENTS:

Berlin and Hamburg: Deutsche Bussan Aktiengesellschaft.
Paris and Lyon: Société Anonyme Française Bussan.
Cape Town and Johannesburg: Mitsui Bussan South Africa (pty.) Ltd.
Buenos Aires: Nambei Compañia de Importación y Exportación Sociedad Anónima.
Rio de Janeiro: T. Haraguchi; *Santiago in Chili:* M. Shirakata; *Mexico:* M. Suzuki; *Los Angeles:* K. Konishi; *Wellington in New Zealand:* G. Iizuka; *Haiphong & Hongay:* K. Mawatari.

DIRECTORS AND AUDITORS:

Managing Directors:

JIHEI INOUYE, *Representative Director and Chairman of the Board of Directors*
SHIGEJI TAJIMA, *Representative Director*
TADAHARU MUKAI
REISUKE ISHIDA
SHIZUO OHTA

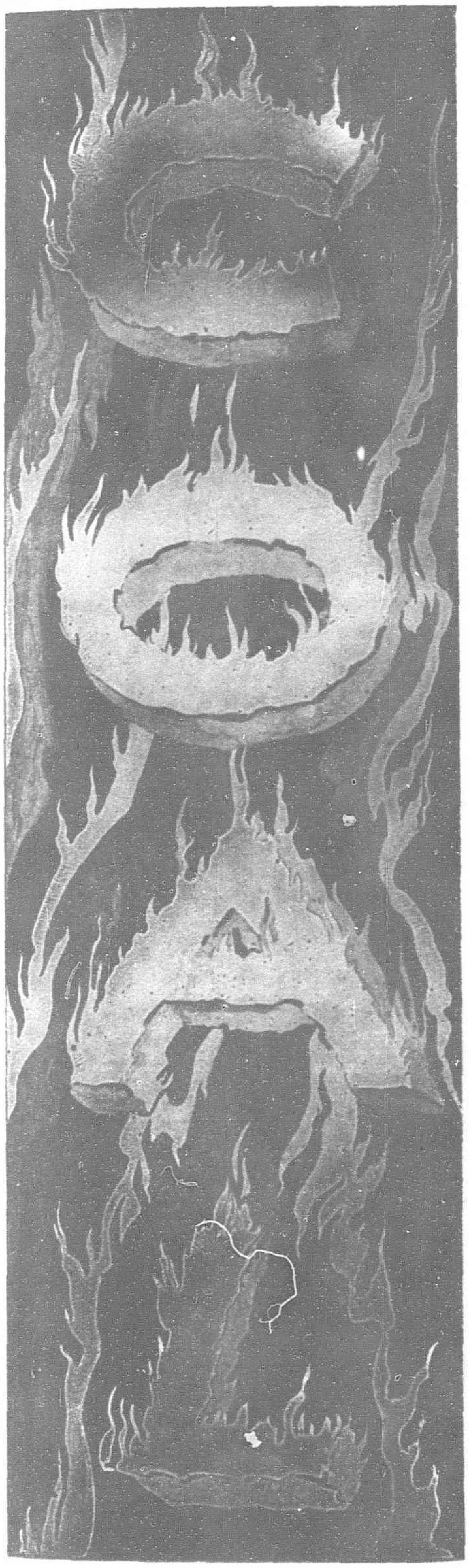
Directors:

TAKAKIYO MITSUI
TAKANAGA MITSUI
S. HASEGAWA
K. NAKAMURA
T. SUMII
K. KANEKO
K. SHIMIZU
S. WATANABE
H. AKAI
T. FURUKAWA

Auditors:

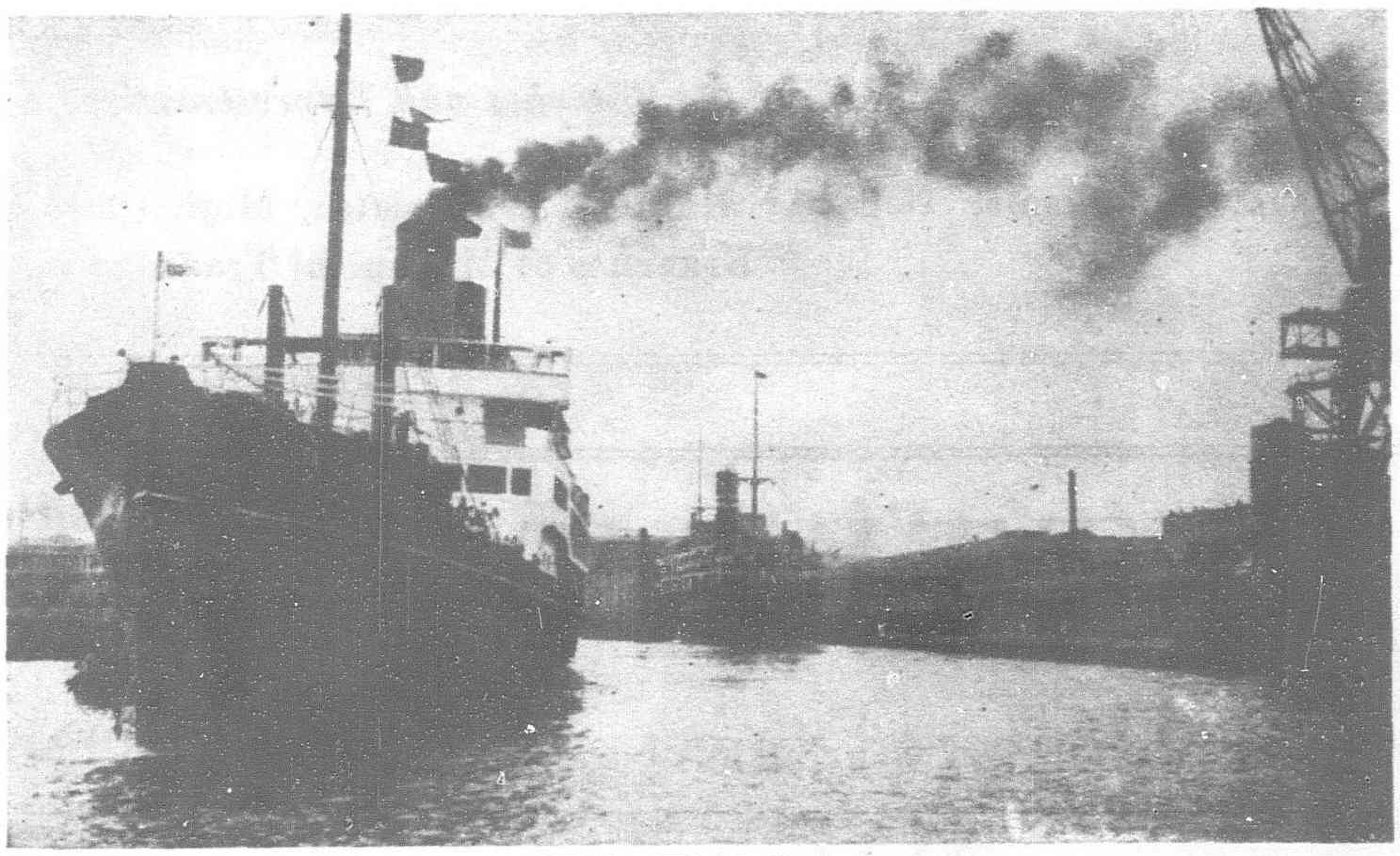
J. ABE
K. INUZUKA
K. NEO
T. MITSUI
A. SASADA

FUSHUN



THE BEST STEAMING COAL IN THE FAR EAST

OUTPUT OF MINES, 8,200,000 TONS



S.M.R. Wharf, Dairen

A new coal pier handling 3,800,000 tons of coal for Export and Bunker Supply is now in operation at Kanchengtsu, across the bay from Dairen. Four 8,000 ton vessels can be accommodated at one time and loaded by boom conveyors at the rate of 900 tons per hour from each conveyor. A coal storage yard with a capacity of 3,000,000 tons guarantees quick dispatch.

Depots: Dairen, Port Arthur, Newchwang, Tientsin, Tsingtau, Tsurumi

Agencies: Chefoo, Manila, Batavia, South Seas, Moji, Takao (Formosa), Nagoya, Shanghai, Sourabaya, Singapore, Osaka, Hongkong, Penang, Yokohama, Niigata

Also Sulphate of Ammonia, Fire Clay, and Talc

Pamphlets and Particulars gratis from any of the above Depots and Agencies, and from the

MINING DEPARTMENT:

South Manchuria Railway Company, Dairen

MITSUBISHI MINING CO., LTD.

Producers and Sellers of Coal, Metals and other Minerals

Capital Y. 100,000,000

Head Office: MARUNOUCHI, TOKYO

Cable Address: "IWASAKIMIN, TOKYO"

Products:

Coal, Coke, Gold, Silver, Electro. Copper, Electro. Tin, Electro. Lead, Tungsten, etc.

Branches and Representatives:

Tokyo, Yokohama, Nagasaki Karatsu, Wakamatsu, Moji, Otaru, Muroran, Hakodate, and all the Branches of Mitsubishi Trading Co., Ltd.

ATTWATER & SONS

ESTABLISHED 1868

Hopwood Street Mills, PRESTON, ENGLAND

MICA and MICANITE

IN ALL FORMS AND QUALITIES.

BAKELITE SHEETS, TUBES, BOBBINS, VARNISH and RESIN for OIL SWITCH GEAR and TRANSFORMERS. VULCANISED FIBRE, SHEETS, TUBES and RODS. PEERLESS LEATHEROID INSULATION EMPIRE CLOTH and TAPES. COTTON and also ASBESTOS DYNAMO TAPES.

PRESSPAHN AND FULLERBOARD IN SHEET AND ROLLS

WHILE I LIVE I'LL CROW

REGD TRADE MARK

EBONITE AND ALL INSULATING MATERIAL FOR ELECTRICAL ENGINEERS

JAPAN

Dear Friends:

You are cordially invited to our lovely all-year-round resorts—one of the best pleasure-grounds in the Orient—this year. Please come with your friends and enjoy your holidays with us.

FOR PARTICULARS
APPLY TO:—

JAPAN TOURIST BUREAU

THOS. COOK & SON LTD.

AMERICAN EXPRESS CO.

AND

ALL TOURIST AGENCIES

BOARD OF TOURIST INDUSTRY JAPANESE GOVERNMENT RAILWAYS

Hongkong and Shanghai Banking Corporation

(Incorporated in the Colony of Hongkong. The liability of Members is limited to the extent and in manner prescribed by Ordinance No. 6 of 1929 of the Colony)

Capital: Authorised Capital $50,000,000
Issued and fully paid-up.. .. $20,000,000

Reserve Funds: Hongkong Currency Reserve Fund $10,000,000
Sterling Reserve Fund .. .. £ 6,500,000
Reserve Liability of Proprietors .. $20,000,000

Board of Directors

T. E. PEARCE, Esq., *Chairman*
Hon. Mr. J. J. PATERSON, *Deputy Chairman*
J. K. BOUSFIELD, Esq.
A. H. COMPTON, Esq.
Hon. Mr. S. H. DODWELL
W. H. LOCK, Esq.
G. MISKIN, Esq.
K. S. MORRISON, Esq.
Hon. Mr. A. L. SHIELDS
H. V. WILKINSON, Esq.

Head Office:
HONGKONG

Chief Manager:
Sir VANDELEUR M. GRAYBURN,
Hongkong

London Branch:
9 Gracechurch Street, E.C.3

Shanghai Branch: 12 The Bund

Branches and Agencies:

AMOY
BANGKOK
BATAVIA
BOMBAY
CALCUTTA
CANTON
CHEFOO
COLOMBO
DAIREN
FOOCHOW
HAIPHONG
HAMBURG
HANKOW
HARBIN
ILOILO
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KUALA LUMPUR
LONDON
LYONS
MALACCA
MANILA
MOUKDEN
MUAR (Johore)
NEW YORK
PEIPING
PENANG
RANGOON
SAIGON
S. FRANCISCO
SHANGHAI
SINGAPORE
SOURABAYA
SUNGEIPATANI
SWATOW
TIENTSIN
TOKYO
TSINGTAO
YOKOHAMA

Interest allowed on Current Accounts and on Fixed Deposits according to arrangement.

Local Bills Discounted. Credits granted on approved Securities and every description of Banking and Exchange business transacted. Drafts granted on London and the chief commercial places in Europe, India, Australia, Africa, China, Japan and America. Safe Deposit Boxes to rent. Terms on application.

SAVINGS BANK OFFICE

Accounts will be kept in Dollars Local Currency.
Deposits of less than $1 will not be received.
Not more than $200 will be received during one month from any single Depositor.
Interest at the rate of 2½% per annum will be allowed upon the monthly minimum balance.
The maximum balance on which interest will be allowed is $5,000.
Deposits may be withdrawn on Demand.
Depositors will be provided with Pass Books in which all transactions will be entered. Pass Books must be presented when paying in or withdrawing money.
Savings Bank accounts also kept in Sterling and U.S. Dollars. Terms on application.

Office Hours—10 a.m. to 3 p.m. Saturdays 10 a.m. to Noon.

A. S. HENCHMAN, *Manager.*

THE ONE HUNDREDTH BANK, LTD.

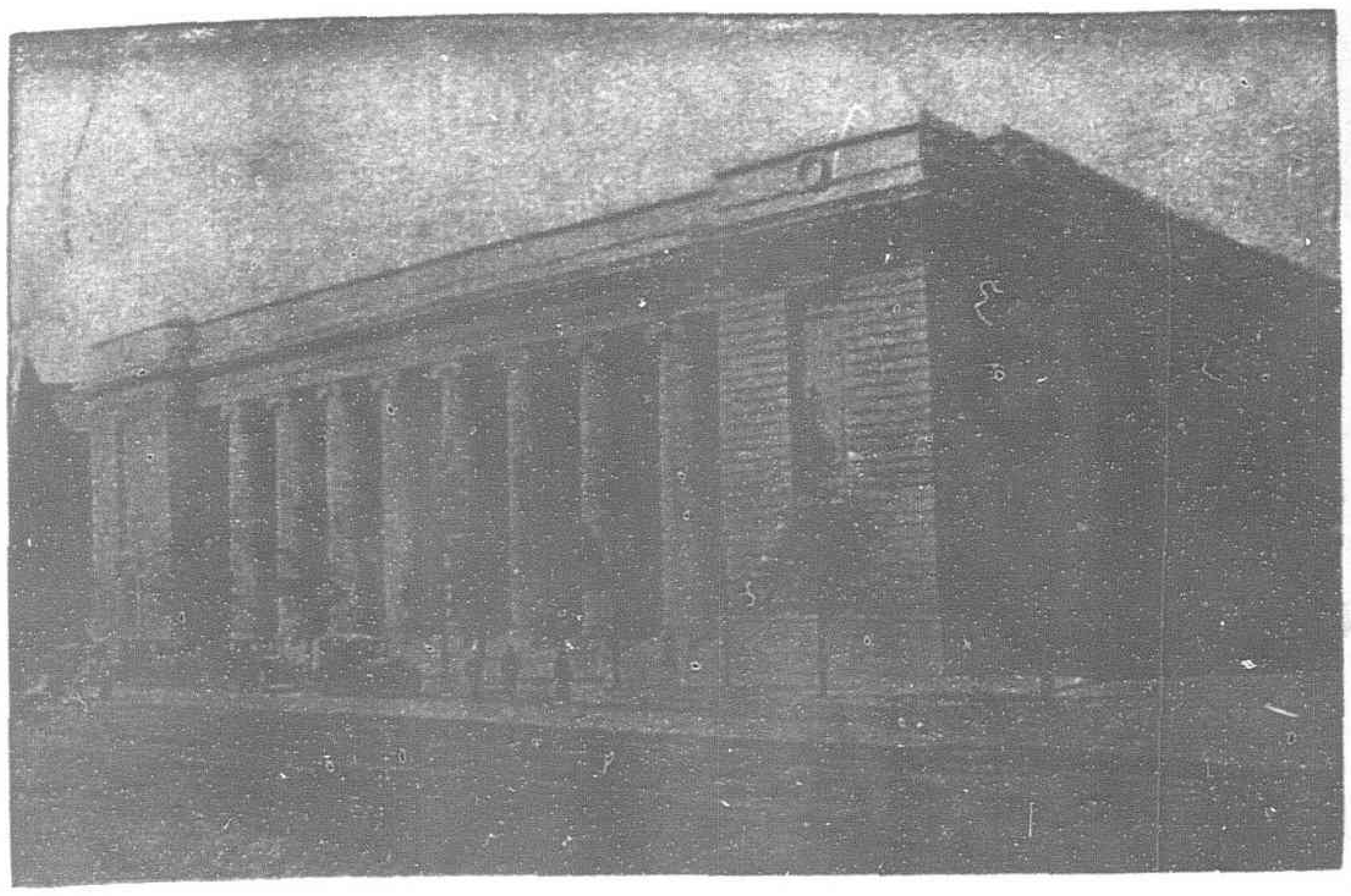
HEAD OFFICE: TORI 1-CHOME, NIHONBASHI-KU, TOKYO
Phone: Nihombashi 141, 3105

Mr. ZENSAKU SEKINE, *President*

Special facilities offered for foreign residents and corporations in Japan
Interest allowed on current and time deposits. Safe deposit box rented

BRANCHES AND AGENCIES:

Yokohama, Kobe, Kyoto, Osaka, Nagoya, Hiroshima, and others in principal cities in Japan



Mitsubishi Bank, Tokyo

THE MITSUBISHI BANK,
LIMITED

CAPITAL SUBSCRIBED - Yen 100,000,000
CAPITAL PAID-UP - - Yen 62,500,000

CHAIRMAN:

Mr. Kiyoshi Sejimo

MANAGING DIRECTORS:

Mr. Takeo Kato Mr. Sobun Yamamuro
Mr. Hideya Maruyama

HEAD OFFICE:

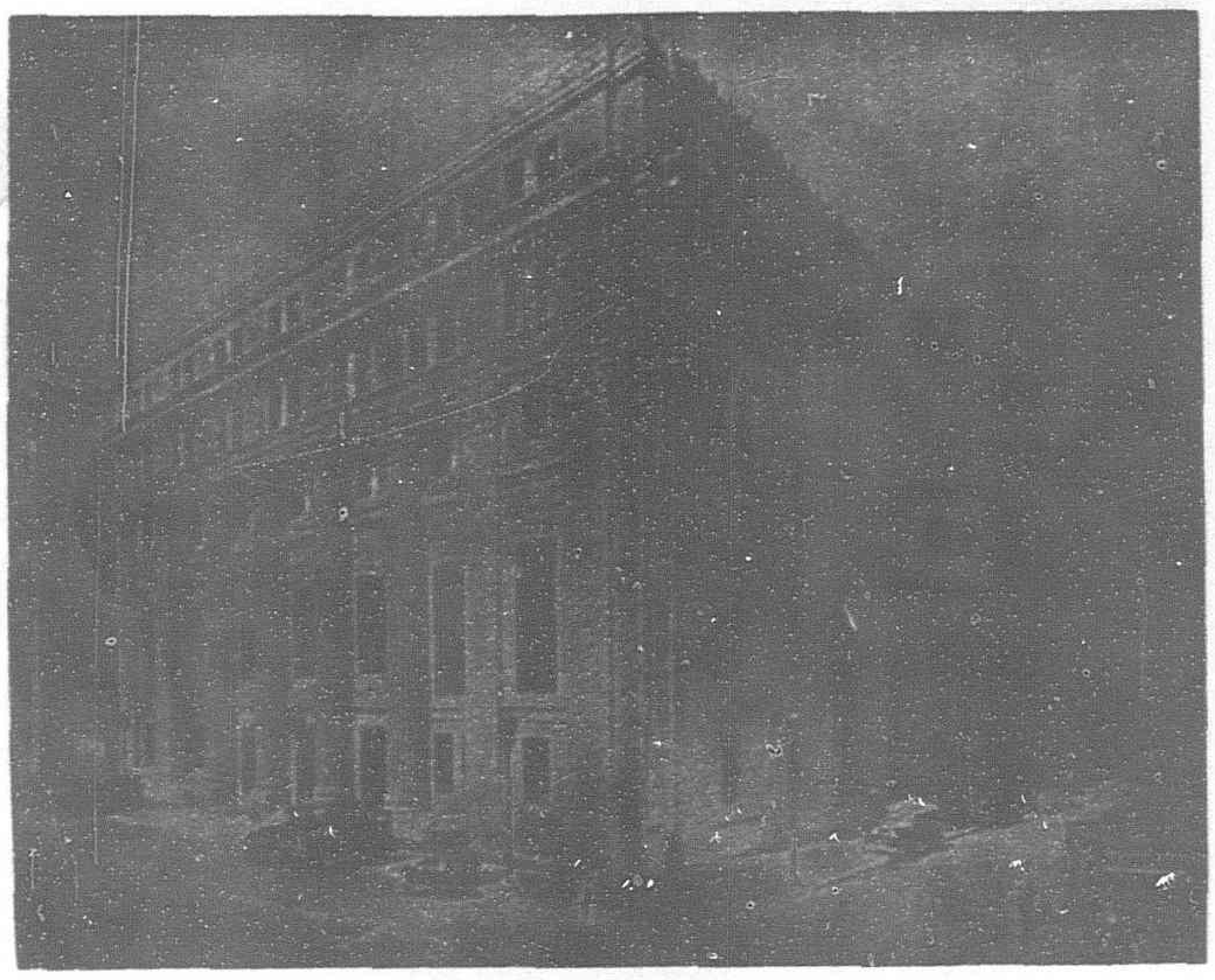
No. 5, Marunouchi, Nichome, Kojimachi-ku, Tokyo.

BRANCHES HOME:

Eitaibashi (Tokyo), Tokio Kaijo Building (Tokyo), Marunouchi Building (Tokyo), Nihonbashi (Tokyo), Yotsuya (Tokyo), Komagome (Tokyo), Nihonbashi-Toricho (Tokyo), Kanda (Tokyo), Shinagawa (Tokyo), Omori (Tokyo), Osaka, Nakanoshima (Osaka), Senba (Osaka), Nishinagahori (Osaka), Kobe, Sannomiya (Kobe), Kyoto, Nagoya, Otaru.

BRANCHES OVERSEAS:

Shanghai Office : No. 93, Canton Road, Shanghai.
London Office : No. 3, Birchin Lane, Cornhill, London, E.C.3.
New York Office : No. 120, Broadway, New York.



Mitsui Bank, Tokyo

THE MITSUI BANK, LTD.

The Oldest Bank in Japan, Founded in 1673

Capital Subscribed..................Y. 100,000,000
Capital Paid-Up....................Y. 60,000,000
Reserve Funds........................Y. 60,800,000

HEAD OFFICE: TOKYO
No. 1 Muromachi 2-Chome, Nihonbashi-ku

Home Branches:

FUKUOKA, HIROSHIMA, KOBE, KYOTO, MARUNOUCHI (Tokyo), MOJI, NAGOYA, NAGOYA - KAMIMAETSU, NIHONBASHI (Tokyo), OSAKA, OSAKA - DOJIMA, OSAKA - KAWAGUCHI, OSAKA - NISHI, OSAKA - SEMBA, OTARU, WAKAMATSU (Kyushu), YOKOHAMA.

Foreign Branches:

Bombay, London, New York, Shanghai, Sourabaya.

London Bankers:

Barclays Bank, Ltd. Midland Bank, Ltd.

New York Bankers:

Bankers Trust Co. Chase National Bank.
National City Bank of New York.

PAID-UP CAPITAL YEN 150,000,000

THE SUMITOMO GOSHI-KAISHA

OSAKA, JAPAN

A Holding Company for Business and Industrial Enterprises of the Sumitomo Interests and Owners of Silver and Gold Mines, Forestlands, Etc.

OFFICES AND DEPARTMENTS

Mining Offices ... ... Konomai & Ohgayu
Forestry Department ... ... Osaka
Sales Departments... ... Tokyo, Yokosuka, Nagoya, Kobe, Kure, Fukuoka, Keijo and Shanghai

The Sumitomo Metal Industries, Ltd.
OSAKA, JAPAN
Subscribed Capital: Yen 50,000,000

The Sumitomo Electric Wire & Cable Works, Ltd.
OSAKA, JAPAN
Subscribed Capital: Yen 15,000,000

The Sumitomo Chemical Co., Ltd.
Subscribed Capital: Yen 20,000,000
Head Office: Osaka, Japan Works: Niihama, Iyo, Japan

The Sumitomo Machinery Works, Ltd.
Subscribed Capital: Yen 5,000,000
Head Office and Works: Niihama, Iyo, Japan

The Sumitomo Besshi Mine, Limited
Paid-up Capital: Yen 15,000,000
Head Office: Niihama, Iyo, Japan Branch: Osaka, Japan

The Sumitomo Warehouse Company, Limited
Paid-up Capital: Yen 15,000,000
Head Office: Osaka, Japan Branches: Osaka, Kobe & Tokyo, Japan

The Sumitomo Trust Company, Limited
Subscribed Capital: Yen 20,000,000
Head Office: Osaka, Japan Branches: Tokyo & Fukuoka, Japan

The Sumitomo Life Insurance Company, Limited
OSAKA, JAPAN
Subscribed Capital: Yen 1,500,000

The Sumitomo Collieries, Limited
Paid-up Capital: Yen 12,000,000
Head Office: Osaka, Japan Branches: Wakamatsu & Otaru, Japan

ESTABLISHED: 1895 INCORPORATED: 1912

THE SUMITOMO BANK, LTD.

OSAKA, JAPAN

Subscribed Capital .. .. Yen 70,000,000
Paid-up Capital .. .. Yen 50,000,000
Reserve Funds .. .. Yen 46,320,000

DIRECTORS:

N. YATSUSHIRO, Esq. ..	Chairman, Board of Directors and Chief Managing Director
K. OHDAIRA, Esq. ..	Managing Director
H. OKAHASHI, Esq. ..	" "
K. OHSHIMA, Esq. ..	" "
M. SOGAME, Esq. ..	" "
BARON K. SUMITOMO	Director
K. HORI, Esq.	"
M. OGURA, Esq.	"
S. IMAMURA, Esq.	"

Home Branches: Osaka, Tokyo, Yokohama, Nagoya, Kyoto, Kobe, Wakayama, Okayama, Onomichi, Niihama, Kure, Hiroshima, Yanai, Shimonoseki, Moji, Kokura, Wakamatsu, Fukuoka, Kurume and Kumamoto.

Offices in Pacific Liners: M. S. "Asama Maru," M. S. "Chichibu Maru" and M. S. "Tatsuta Maru."

Foreign Branches: London, New York, San Francisco, Los Angeles, and Shanghai.

Affiliated Banks: The Sumitomo Bank of Hawaii, Honolulu. The Sumitomo Bank of Seattle, Seattle. The Sumitomo Bank of California, Sacramento, Cal.

Correspondents: Maintained in all important places at home and abroad.

The Bank buys, sells and receives for collection Drafts and Telegraphic Transfers; issues Commercial and Travellers' Letters of Credit available in all important parts of the world, and acts as Trustee for Mortgage Bonds, besides doing General Banking Business.

THE BANK OF TAIWAN, LTD.

Established 1899

President : JIRO YASUDA, Esq.
Vice-President : MASASHIKO WADA, Esq.

Directors :

SEIZO KONDO, Esq.
KENJI YAMAMOTO, Esq.
JINCHI TAMAKI, Esq.

Head Office : Taipeh

Tokyo Branch :

No. 2, 1-chome Marunouchi, Kojimachi-Ku.
Z. YAMAMOTO, Esq., *Manager*

Branches and Agencies :

Japan : Kobe, Osaka, Tokyo, Yokohama, Giran, Heito, Kagi, Karenko, Keelung, Makong, Nanto, Shinchiku, Shoka, Taichu, Tainan, Taito, Takao, Tamsui, Toen.

Kwantung: Dairen.

China : Amoy, Canton, Foochow, Hankow, Shanghai, Swatow.

Java : Batavia, Semarang, Sourabaya.

Others : Bombay, Hongkong, London, New York, Singapore.

Correspondents in the principal cities and towns throughout the world.

Industrial Bank of Japan, Limited

(NIPPON KOGYO GINKO)

Established by the Japanese Government by virtue of a Special Enactment of Imperial Diet

Capital Subscribed - - - Yen 80,000,000

Head Office: 8, 1-chome Marunouchi, Tokyo.
Cables: "Kogin," Tokyo

BRANCHES :

Tokyo: Nihonbashi *Osaka:* Koraibashi
Kobe: Nishimachi *Nagoya:* Minaminagashima-cho
Fukuoka: No. 80 Tenjincho.
Telephone: Fukuoka 1080; 6010

TOYOTARO FUKI, Esq., *President*

DIRECTORS:

Ichimatsu Horai, Esq. Taro Kimimori, Esq.
Koichi Kawakami, Esq. Kotake Shigeru, Esq.

AUDITORS:

Count Yoshinori Futaara
Teizo Iwasa, Esq.
Naoichi Tanaka, Esq.

All descriptions of general banking, exchange, both foreign and domestic, and trust and corporation financial business transacted.

Correspondents in the principal cities at home, and in London, Paris, New York, and San Francisco.

Business Transacted:

1.—Loans on the security of public bonds, of debentures and shares, estates (Zaidan), specified land and buildings.
2.—Subscription and underwriting public bonds or debentures.
3.—Deposits and safe custody of valuables.
4.—Trust company business.
5.—Discounting of bills.
6.—Foreign exchange business.
7.—Other banking business sanctioned by the Minister of State for Finance in accordance with Law of Ordinance.

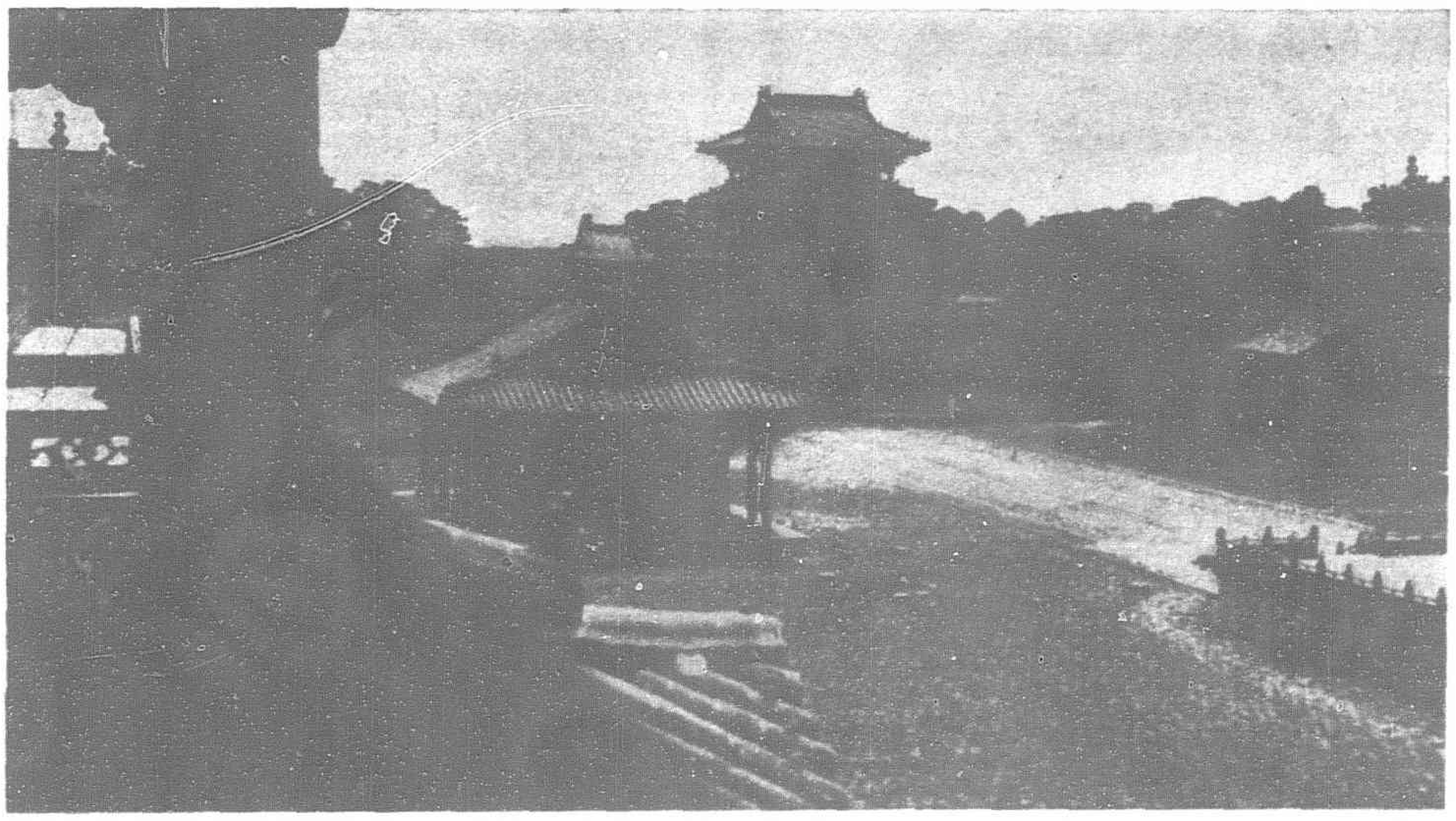
SOUTH MANCHURIA RAILWAY

Head Office : DAIREN *Cable Address :* " MANTETSU " *Codes :* ABC 5th Ed., Al, Lieber's & Bentley's

IMPORTANT OVERLAND LINK BETWEEN EUROPE AND THE FAR EAST

From BERLIN to DAIREN in only 11 DAYS

The fastest and most comfortable trains in the Far East carry you to the much-talked-of Cross-Road of East Asia "Manchoukuo."



North Mausoleum, Mukden

YAMATO HOTELS

at Dairen, Hoshigaura (Star Beach), Ryojun (Port Arthur), Mukden, and Hsinking are directly managed by the South Manchuria Railway Co.

TICKET AGENTS

Tickets are issued by, and Pictorial Guide Books and Information may be obtained, at the following offices:

Messrs. The Japan Tourist Bureau; Thos. Cook and Son; The American Express Company; The International Sleeping Car Company ("Wagonlits"); The Nordisk Resebureau.

S.M.R. Branch Offices } Tokyo, Osaka, Shimonoseki, Shanghai, Peiping, Mukden, Hsinking, Kirin, Harbin, Paris, New York, etc.

Capital (Fully Paid-up):
Yen 100,000,000

Reserve Fund:
Yen 137,150,000

**CORRESPONDENTS
AT ALL
THE CHIEF
COMMERCIAL CITIES
IN THE WORLD**

The Yokohama Specie Bank, Ltd.

Established 1880

DIRECTORS:

President: TOSHIKATA OKUBO
Vice-Presidents { YAKICHI SUITSU, S. YAMANOUCHI
BARON KOYATA IWASAKI
BARON ICHIZAEMON MORIMURA
KENJI KODAMA
HIGDESHIE KASHIWAGI
KANJI YANO
NORI WATANABE
D. NOHARA
T. NISHIYAMA
C. ARIMA

Head Office: YOKOHAMA
Manager: C. ARIMA

TOKYO BRANCH
No. 6, 1-Chome, Honkokucho,
Nihonbashi-ku
Manager: D. NOHARA
Marunouchi Agency
No. 2, 1-Chome, Marunouchi, Kojimachi-ku.
Agent: D. Nohara

SHANGHAI BRANCH
No. 24 The Bund
Manager: S. ASADA

BRANCHES AND AGENCIES:

Alexandria
Bangkok
Batavia
Berlin
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Calcutta
Canton
Chefoo
Dairen
Fengtien
Hamburg
Hankow
Harbin
Hongkong
Honolulu
Hsinking
Karachi
Kobe
London
Los Angeles
Manila
Moji
Nagasaki
Nagoya
New York
Osaka
Otaru
Paris
Peking
Rangoon
Rio de Janeiro
San Francisco
Seattle
Samarang
Shanghai
Singapore
Sourabaya
Swatow
Sydney
Tientsin
Tsingtao
Yingkow

CORRESPONDENTS AT ALL THE CHIEF COMMERCIAL CITIES OF THE WORLD.

Interest allowed on Current Accounts and Fixed Deposits on terms to be ascertained on application.
Every description of Banking business transacted.
For particulars, apply to the Managers.

Cable Address :
" IWASAKISAL TOKYO "

Codes Used :
Acme, Bentley's Complete
Phrase, Kendall's, etc.

MITSUBISHI SHOJI KAISHA, LTD.

(Mitsubishi Trading Co., Ltd.)

Head Office : MARUNOUCHI, TOKYO, JAPAN

IMPORTERS AND EXPORTERS, MANUFACTURERS, COMMISSION MERCHANTS, BROKERS, SHIPOWNERS

BRANCHES AND REPRESENTATIVES :

JAPAN — Osaka, Kobe, Kure, Moji, Nagasaki, Saseho, Nagoya, Yokohama, Otaru, Keelung, Taihoku, Takao, Keijo, Fusan, Seishin, etc.

ABROAD—Dairen, Mukden, Hsinking, Harbin, Antung, Yingkow, Chinwangtao, Tientsin, Tsingtao, Shanghai, Hankow, Hongkong, Manila, Soerabaya, Singapore, Bangkok, Calcutta, Bombay, Beirut, Alexandria, Johannesburg, Sydney, Melbourne, London, New York, Seattle, San Francisco, Buenos Aires, etc.

AGENCIES :

Berlin : MITSUBISHI SHOJI KAISHA, G.m.b.H.

Paris, Lyon and Casablanca : SOCIETE ANONYME FRANCAISE MITSUBISHI.

Teheran : PERSIA AND JAPAN TRADING CO., LTD.

EXPORTING FROM JAPAN :

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FAR EASTERN CROSS-CURRENTS

A STATEMENT was issued by Prince Konoye, Premier of Japan, on December 22, giving a general outline of what Japan demands of China.

"Japan, China and Manchoukuo will be united by the common aim of establishing a new order in East Asia" the Premier said, "and realizing a relationship of neighborly amity, common defence against communism and economic co-operation."

"For that purpose it is necessary, first of all, that China should cast aside all narrow and prejudiced views belonging to the past and do away with the folly of anti-Japanism," continued the statement. "Japan frankly desires China to enter, of her own will, into complete diplomatic relations with Manchoukuo.

"Existence of Comintern influences in East Asia cannot be tolerated. Japan, therefore, considers it an essential condition of the adjustment of Sino-Japanese relations that there should be concluded an anti-Comintern agreement between the two countries in consonance with the spirit of the anti-Comintern Agreement between Japan, Germany and Italy."

As an anti-Communist measure Japanese troops should be stationed at specified points during the time the said agreement is in force, the statement went on, and the Inner Mongolian region should be designated as a special anti-Communist area.

Regarding economic relations between the two countries, the statement declared, "Japan does not intend to exercise an economic monopoly in China, nor does she intend to demand of China that she limit the interests of those third Powers which will grasp the meaning of the new East Asia and are willing to act accordingly," and, "Japan seeks only to render effective co-operation and collaboration between the two countries."

The statement further assured that Japan demanded only the minimum guarantee needed for the execution by China of her functions as a participant in the establishment of a new order.

"Japan not only respects the sovereignty of China but she is prepared to give positive consideration to questions of abolition of extra-territoriality and of rendition of concessions and settlements—matters which are necessary for the full independence of China," the statement concluded.

Although the spokesman at Chungking failed to see anything new in this statement, it does indeed mark a new step in the evolution of the minds of the Japanese people regarding the establishment of a new order of Asia. The Japanese have cast aside all ideas of intervention, interference, control or guidance so far as the affairs of China are concerned. They desire to see in China a perfectly independent state and a strong participant in the maintenance of a new order in Asia, which is frequently mentioned as "An East-Asian Community" by Japanese publicists.

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Prince Konoye, Premier of Japan, tendered the resignation of his Cabinet to the Throne on January 4, and Baron Kiichiro Hiranuma, President of the Privy Council, was summoned to the Imperial Palace on the evening of the same day by the Emperor to form a new Cabinet. Baron Hiranuma succeeded in creating a new Cabinet on the next day. The full list of the cabinet members, which included the representatives of the two major political parties, disappointed any hope which might have been entertained in Chinese circles that the Cabinet change in Japan would lead to an internal struggle between the services and the political parties. Prince Konoye himself remains in the new Cabinet as a Minister without portfolio, and it is hoped that the co-operation between him and Baron Hiranuma will bring about stronger unification of the people.

To brand Baron Hiranuma as a fascist is entirely wrong. Even if the now defunct organization, of which he was President, contained some elements of extreme rightists, that has nothing to do with his own ideas. Lightning changes are occurring to the minds of the Japanese leaders and people, who learned much from the bitter experience during the past eighteen months. They have realized that they cannot retreat whatever plight they may have to endure, and that the Far Eastern situation cannot be mended by mere patchwork. They are not considering the success or failure of a few individual statesmen or generals, but only of the fate of the people as a whole. Whatever cliques or factions may have existed in the past, the Japanese people have forgotten old feuds. A new criterion is needed to observe what is happening in Japan, and consequently in the Orient.

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The full text of the latest British Note to the Japanese Government was released in London on the morning of January 16.

Strong language is used in the communication, but a Reuter report from London said it was stressed, however, that the Note does not finally close the door to the possibility of amicable settlement of the differences between Great Britain and Japan.

Newspapers in Shanghai gave almost unanimous approval to the Note, but declared that mere sending of a Note to Japan was of no avail and that concerted action of the Powers against Japan was needed.

The Note begins by expressing the "grave anxiety" in which Great Britain has been left by a study of Japan's new policy in Far Eastern affairs, as set out in recent statements by the late Prime Minister of Japan, Prince Konoye, and other Japanese statesmen, and declares that "this anxiety has not been removed" by conversations on the subject which the British Ambassador in Tokyo has had with the Japanese Foreign Minister from time to time.

The Note also says that the British Government "cannot agree, as suggested in Japan, that the Nine-Power Treaty is obsolete or that its provisions no longer meet the situation, except in so far as the situation has been altered by Japan in contravention of its terms."

While the British Government maintains that a modification cannot be effected unilaterally, the Note continued, it will be ready to consider any constructive suggestions if the Japanese Government has them.

France joined the United States and Great Britain in rejection of Japan's denunciation the Nine-Power Treaty, and sent a Note to Japan on January 17. The French Note insists on the maintenance of French rights in China and suggested that the only way to change the Nine-Power Treaty would be through international negotiation.

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Like a bolt from the blue it was reported that Mr. Wang Ching-wei, Deputy Executive of the Kuomintang, had mysteriously disappeared from Chungking. It was subsequently confirmed by a Chinese news agency that he had arrived at Hanoi by way of

Kunming, leaving the Szechuen capital on December 18 by airplane. Speculation about his departure was widespread, some attributing it to a dissension of views between himself and the Generalissimo, while others asserted that it would have been impossible for Wang to leave Chungking without knowledge, and therefore with the consent, of highest Government leaders.

Amidst rumors his lengthy statement was released in Hongkong on the night of December 30, outlining three points as the basis of Sino-Japanese peace negotiations. They were :

(1) A reasonable solution of the issue of the four northern provinces ;

(2) Anti-Comintern collaboration ;

(3) Economic co-operation.

Of special importance, Mr. Wang said among other things, " that a withdrawal from China of the Japanese army in its totality must be universal in all directions."

" Since the Japanese Government has solemnly issued its declaration of December 22, it is possible through peaceful means not only to assure the security of the northern provinces but also to recover the territory lost in the course of the present war and to preserve China's national sovereignty, administrative independence and integrity," Mr. Wang stated.

This statement was not published in the Chinese newspapers, and Chungking officials were naturally reticent about it. Then the second lengthy statement of Mr. Wang was released on January 8. It was actually a telegram sent on December 28 to the Central Executive Committee of the Kuomintang and the Chinese Supreme National Defence Council. This statement read :

" On the 9th of this month (December 9, 1938), I expounded to the General Executive of the Kuomintang, General Chiang Kai-shek, the view that the difficulties now confronting China arose out of the problem of how to sustain the war, and that with regard to Japan they arose out of the problem of how to end the war, that both countries realized their own particular difficulties as well as the difficulties of the other, and that therefore, peace is not an impossibility.

" In addition, I said that, on this issue, in so far as foreign relations were concerned, we might have expected the assistance of Great Britain, the United States and of France, the acquiescence of the Soviet Union, the non-intervention of Germany and Italy and especially the awakening of Japan. And if Japan should come to the realization of the fact that China could not be subjected by force of arms nor the Far East be brought under its absolute hegemony, then peace would eventually come to the relief of all. These views were known to all those comrades who were present at our conversation.

" The statement issued by the Japanese Government on December 22 indicated that Japan has come to the proper realization of her position with regard to China. It may be recalled that although the terms proposed by Japan through the intermediary of the German Ambassador, prior to the fall of Nanking in the early part of December last year (1937), were more unfavorable and even less definite, yet General Chiang, in view of the general situation, had no hesitation in accepting them as the basis on which to negotiate an honorable peace.

" Subsequently, however, as the result of Japan's own hesitation and change of mind, and the consequent alterations of the proposed terms and the widening of their scope after the fall of Nanking, the matter was left in abeyance. But in view of the present reconsideration of her attitude towards China by Japan, it is natural that we should respond with a statement on what basis we may negotiate with Japan in order to find a proper solution of the various questions with a view to re-establishing peace and stabilizing the Far Eastern situation. This opportunity to end the present war must not be allowed to pass again.

" Assistance from Great Britain, the United States and France is gradually materializing. But such assistance can only have the effect of putting us in a more favorable position to negotiate peace ; it is by no means sufficient to have any effect on the outcome of the war or enable us to secure a decisive victory by military measures. This is well known to everybody and needs no further explanation. With regard to the international situation, it is obvious that without the co-operation of Great Britain, the United States and France, Soviet Russia cannot take any independent action to help China on any large scale, while Germany and Italy will certainly not be reluctant to assist in the re-establishment of peace. With regard to the internal situation, with the exception of the Communist Party and a minority, who would like to see China doomed and the National Government overthrown, I can see no proper reason why anybody should be opposed to honorable peace."

This new peace move on the part of Mr. Wang caused an uproar at Chungking. He was denounced as a traitor and defeatist, and deprived of all his official positions. Whatever he may be, the fact remains that one of the most important leaders of the Government and the party has left the capital, and that shows something is happening at Chungking.

When his sudden flight from Chungking was confirmed, the public in China was puzzled. Those who saw an ominous foreboding for the Chiang Kai-shek Administration tried hard to minimize its effect. Some maintained that he went to Hanoi to consult a doctor, and said that he was an important leader both in the Kuomintang and in the National Government, and his views would always command respectful hearing from every quarter. It seemed, therefore, quite clear that he had left Chungking for personal reasons. Then a report came from Hongkong that Mr. Chen Kung-po, one of the best friends of Mr. Wang, said " Mr. Wang is proceeding to Hongkong on his way to Europe on a special mission for the Chinese Government," and some circles knowingly mentioned several plausible explanations for his mission abroad. The stir caused by his second peace move clearly indicates its effect.

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Interesting details regarding the Sino-Soviet relations through the past two years were revealed by Mr. Sun Fo, President of the Executive Yuan, in a speech delivered at Chungking on January 7. He said that " Russia would agree to go to war with Japan on three conditions.

" Firstly, that the League of Nations enforced sanctions against Japan, and then Russia, as a member of the League, would carry out her obligations ;

" Secondly, if the League failed to enforce sanctions, then a common understanding must be reached between Britain, America, France and Russia for joint action against Japan ;

" Thirdly, if the Powers failed to reach an understanding, then Russia could go to war against Japan only if Japan invaded Soviet territory."

Mr. Sun Fo went on to say that when the then Soviet Ambassador to China, M. Bogomoloff, returned to China from Moscow prior to the outbreak of the Lukouchiao Incident, he submitted three proposals to the Chinese Government.

That China should propose a convocation of a Pacific Peace Conference (It was regarded by the Chinese Government as ineffective, since Japan probably would not participate) ;

That China and Russia should sign a non-aggression pact (It was signed in August, 1937, forgetting perhaps the Outer-Mongolian question) ; and

That China and Russia should sign a mutual assistance pact.

According to Mr. Sun Fo, negotiations for a Sino-Soviet Mutual Assistance Pact were not opened, since the conclusion of such a Pact before, and after, the outbreak of the Lukouchiao Incident was an entirely different matter.

The conclusion of such a Pact prior to the Lukouchiao Incident might have prevented war, but its conclusion at this moment would immediately oblige Russia to go to war against Japan, Mr. Sun Fo continued.

With European tension on the increase during the past year, Russia was unable to go to war on both fronts, and was forced to adopt a less positive policy in the Far East, restricting her assistance to China to merely moral, diplomatic and material assistance, Mr. Sun Fo further stated.

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The influx of Jewish refugees into the already overcrowded Shanghai provides a knotty problem. Through the past few months 1,500 have arrived in Shanghai. They have been well taken care of, thanks to the activities of three organizations, the Committee for the Assistance of Jewish Refugees in Shanghai, the Relief Society for German-Austrian-Jews and the International Committee for Granting Relief to European Refugees. Sir Victor Sassoon, at present in London, has contributed the sum of $150,000 to be used as a rehabilitation fund for European Jewish emigres.

Shanghai has been hard pressed for funds to take care of Chinese refugees since the outbreak of the Sino-Japanese hostilities, and it is not likely that the various international charitable organizations here will be able to extend the scope of their efforts in the near future. The Shanghai Municipal Council feels that the city is one of the last in the world which should be expected to assume a large share of the burden of the present European emigration problem.

In view of the pressing nature of the problem, the Council requested the Consular Body to give it due consideration. At present nothing can be done locally to prevent further groups of emigres from landing in Shanghai, as there is no authority locally which can turn them away.

It is reported that a total of nearly 300 emigres have obtained permission from the port authorities in Dairen to settle there, and 20 persons of the group which came to Shanghai aboard the Italian liner *Victoria* on January 15, were actually proceeding there.

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Miss Pearl Buck, celebrated novelist and a winner of the Nobel Prize for 1938, was remarkably frank in an interview with the press at Doylestown, Pennsylvania, if a Reuter report from that town is correct.

"The open door, as most Americans like to think of it, never existed in China," she said. "The principle of equal opportunity for commercial development in China has always been applied irregularly and with a good deal of favoritism. I am convinced that Japan, after a necessary period for readjustment, will apply the principle, at least as much as it has been applied in the past."

Her statement met with a mixed reception in China. While one set of people asserted that the first part of her statement was nothing but candid truth, another maintained that Chiang and China can do no wrong, disagreed with her, but mildly, in deference to her fame and her sympathy with the Chinese people.

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Interesting comment on the Yunnan-Burma highway by the *Times*, London, and by the United States Ambassador to China, Mr. Nelson T. Johnson, according to recent reports.

The *Time* discussed the potentialities of the highway on January 14 in an article entitled, "The Back Door to China." The article said that the road was metalled and wide, but competent judges hesitated to say whether it would be able to stand up to much heavy traffic without a great deal more work being put into it.

Government cargo, the article continued, should be seen on the move this month, and on until May. Assuming that 100 lorries are sent out each day with 200 tons of cargo altogether, and that the round trip takes a fortnight, 10,000 tons of cargo should be transported in 3½ months, before the rains comes.

As a commercial channel, however, the road cannot be relied upon until November or December. By then, the course of the war in China may have changed, the article added.

The highway was also the subject of an editorial in the same paper. Both Whitehall and Rangoon, the paper said among other things, have been curiously slow to grasp the possibilities of the route, which, thanks to China's initiative, may one day enable Great Britain to offset on the Irrawady at least some part of her losses on the Yangtze and elsewhere.

Mr. Johnson described his journey along the new highway and said that the surface of the road was wide enough for two lines of traffic, but was being widened. Parts of the road, which were at first washed out by heavy rains, had been reconstructed more strongly. Stone bridges were rapidly replacing the original wooden structures.

It is reported on the other hand that immense difficulties are confronting the workers on two railways, one to connect Kunming with Burma, and another to link Kunming and Suifu, in Szechuen, owing to the mountainous nature of the country which has to be traversed. It is expected, however, that the Kunming-Suifu line will be completed in April 1941, and another line about the same time. If the war stretches into 1941, these lines will serve as vital arteries for the inflow of munitions into China.

It is a matter of significance that transit of arms and ammunition through Burma to Yunnan is on the increase since the conclusion of contracts with Great Britain for a £10,000,000 sterling loan. British supplies totalled 60,000 tons during a two-month period in November and December, while additional shipments of 60,000 tons are *en route* to China at the present time, it was reported.

A Reuter report from London dated January 13 said that an American-built military plane with heavy armament had arrived in Rangoon and was being sent across the frontier to China, and that the plane was a demonstration model sent in advance of others which were coming on specially chartered ships. American pilots, it was added, have begun to arrive in Rangoon *en route* to China to train the Chinese in the use of the machines, and a consignment of machine-guns for China arrived in the same ship which brought the plane.

In view of these facts, the statement issued by the Burmese Government is most interesting. Recalling the Sino-Burmese Convention of 1894, providing for the fostering of mutual interests and trade relations between Burma and Kunming, the statement points out that in later years conditions became adverse and trade languished. A revival of this trade, however, has already commenced, and the Burma Government envisages important developments in the future. In view of the recent unrest in Burma, and the feeling entertained in some Burmese quarters that the activities of foreign traders sometimes are inimical to Burmese interests, the final part of the statement is of special importance. It says that the Government wishes to make it clear that its foremost consideration will be the interests of the people of Burma, and that the Government is fully conscious that it will be as necessary to safeguard the country from possible dangers which may follow in the train of great trade development, such as a large influx of persons from China.

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According to a Reuter report from London dated December 23, Japan's alleged rôle in the spread of the drug traffic in areas under her control was put under the spotlight in the House of Commons on the previous day, when the matter was raised by Lieutenant-Commander R. T. H. Fletcher. He vigorously charged Japan with "undoing the League's good work" and fostering the illegal drug traffic throughout the world, as an instrument of her policy to promote the degradation of the Chinese. He also revealed the situation at Hongkong, where, he said, the local Government was "unable to cope with the drug traffic." Over 3,000 heroin dens, he said, were operating at Hongkong, and over 300,000 opium and heroin pills were consumed there daily. There were 40,000 opium addicts, he stated.

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The fishery disputes between Japan and the Soviet Union were further aggravated, when the Moscow authorities notified the Japanese Embassy on January 3 that all fishery lots heretofore operated by Japanese, whose terms have expired, will be auctioned in February. Negotiations are certain to fail if the Soviet Government persists in its repudiation of the so-called stabilized lots—lots agreed upon to be operated by the Japanese.

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New King's Regulations were posted at the British Consulate-General at Shanghai on December 20 for general information. The Regulation, known as "No. 2 of 1938" and cited as "The Licensing of Newspapers Regulations 1938," forbids any British subject or corporation to be connected with the printing or publishing of any publication in any language other than English without the written consent of His Britannic Majesty's Ambassador in China.

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A statement announcing the deferment of payment on loans secured on the Chinese Customs Revenues was made at Chungking by the official spokesman of the Ministry of Finance on January 16. For over a year, the statement said, the Japanese authorities have been detaining revenues pledged for debt service collected in areas under their military occupation, with the exception of a single remittance from the Shanghai Customs last June. Under the existing conditions, the statement added, the Chinese Government has very reluctantly been forced to the conclusion that "this situation has become too anomalous to be continued." "Therefore, the Government has been obliged to reject the request of Sir

Frederick Maze, Inspector-General of Customs, for a further advance."

Following the announcement the market for Chinese bonds in London was completely paralyzed, according to a Reuter report. It may be recalled that the Anglo-Japanese Customs Agreement was concluded on May 3, 1938, and it was admitted in financial circles to have been designed to preserve the integrity of the service as a whole, and to maintain China's credit at a time when its maintenance was a matter of great importance.

The agreement provides that the Customs revenue collected in the Japanese occupied areas shall be deposited in the Yokohama Specie Bank, and a large sum has been already accumulated which would become available if the agreement is recognized by the Chiang Kai-shek Administration and implemented. The agreement also provides for the remittance of adequate quotas of Customs receipts from Japanese-controlled ports, and this money, with proportionate contributions from the Chiang Kai-shek Administration, was to be used to take care of the Customs-secured loans.

Thus the agreement was based upon a well-established international legal precedent which was used in apportioning the financial obligations of the old Austro-Hungarian Empire and the ancient Ottoman Empire. It should be admitted that the Chiang Kai-shek Administration was not a party to the agreement, and did protest against the fact that it was not consulted. But it could accord at least *de facto* recognition to the agreement, which is in conformity with International Law.

Following the failure of the Chungking regime to agree to the execution of some portions of the agreement, the Japanese authorities also refused to carry out their part of the agreement. Remaining unexecuted are the agreement to transfer to the Yokohama Specie Bank the balance of the Customs accounts with the Hongkong and Shanghai Bank in each port under Japanese occupation and the undertaking to pay to the Japanese Government arrears of the Japanese portions of the Boxer Indemnity held at the Hongkong and Shanghai Bank since September 1937.

It is interesting to note in this connection that 95 per cent of the total Customs revenue is being collected in Japanese controlled ports, and the Customs revenue constituted the bulk of the national revenue of China.

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A fine example of an understanding between a British enterprise and the Japanese authorities and its profitable result was shown in the report of the 26th ordinary general meeting of the Chinese Engineering and Mining Co., Ltd., held in London on December 29, with reference to the Kailan Mining Administration.

Mr. W. F. Turner, Chairman, said in brief: "The Directors' report and accounts for the year ended on June 30, 1938, compare very favorably with those of the preceding year.

"There is a net profit of £215,211, and a net available balance of £259,743 after providing for taxation.

"We propose therefore to declare a dividend of 7½ per cent free of income-tax, as against a dividend of five per cent free of tax for the preceding year."

The directors' report states that the year 1937-38 has been one of great difficulty in the conduct of the business of the Kailan Mining Administration.

Finally, however, a better understanding between the Japanese authorities in North China and the Kailan Mining Administration has been brought about, the Chairman said. The Nipponese authorities were now showing every disposition to protect Kailan and to assist in increasing the production and transportation of Kaiping coal.

An urgent demand for Kaiping coal had arisen in the market of Japan, North China, and Shanghai, and the Kailan Mining Administration was making every effort to produce it at maximum output from the existing mines. The Chairman continued:

"It has become evident that in order to meet this demand, which may be expected to increase with the further industrialization of the Far East, it will be necessary to open a new mine capable of producing about one million tons of coal per annum, and a scheme with that object is in course of preparation by engineers.

"Together with our partners, the Lanchow Mining Company, we are satisfied as to the necessity of providing for this large increase of output to meet the demands of Japan, China, and the Far East generally; indeed, it is being urged upon us by our principal consumers.

"It will, of course, involve considerable capital expenditure spread over several years, and you will see from the balance-sheet which we have put before you that we are quite prepared to meet it."

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Hungary accorded *de jure* recognition to Manchoukuo on January 10 and expressed the intention to participate in the anti-Comintern agreement, accepting the invitation of Japan, Germany and Italy, the three original signatories.

Czechoslovakia may soon follow the example of Hungary and recognize Manchoukuo, it was predicted in Tokyo, recalling the fact that M. Frantisek Havlicek, Czechoslovakian Minister to Tokyo, recently exchanged views with Mr. Yuan Chen-tuo, Manchoukuoan Ambassador.

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Contrary to the gloomy predictions prevailing after the capture of Canton by the Japanese, the Pearl River has been opened to foreigners and Chinese.

A report from Canton dated January 7 quoted the Chinese, who arrived there by a ship on the Canton-Macao service inaugurated by the Japanese, as saying that the passengers aboard the ships are well-treated and no discrimination is shown.

The first foreign steamer for Canton, the s.s. *Kinshan*, left Hongkong on January 11, carrying 40 foreign passengers. It is believed that the ship's voyage will be the prelude to a general reopening of the Pearl River in the near future.

It may be recalled that on November 23 last year, the British s.s. *Wuchang* loaded with supplies and equipment for the refugees steamed up the River from Hongkong, but she was not allowed to carry passengers.

The Hongkong correspondent of the *Shanghai Evening Post* reported on January 12 that the Japanese military authorities in Canton had disclaimed any intention to seize private property whatever, and if any private premises had been commandeered for military and other purposes, such action was temporary and the owners would be given rent for property occupied or it would be handed back to them when they returned.

With the restoration of electric and water supply, the city has assumed some semblance of normalcy, the correspondent quoted travellers from Canton as stating. However, only poor people have returned to the city. Some women are seen in the streets at times, for it is admitted that Japanese troops in Canton proper behave well. The conditions in the outskirts and villages are said to be different.

Japanese army notes tendered by soldiers are accepted at the rate of Hongkong currency, i.e., one yen for three provincial dollars or two national dollars. Chinese currencies are of course more popular, the correspondent added.

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The Japanese military police in Hankow entered the French Concession with the consent of the French Consul on January 11 to join the French police in a search for persons alleged to be engaged in anti-Japanese activities and to be taking refuge in the Concession.

Altogether 27 Chinese were arrested, of whom 17 were later released, and the remaining 10 were placed under detention in a police station in the French Concession.

French and Japanese conversations were started on the same day and reached an agreement on January 16. As the result of the agreement, the French authorities lifted restrictions on traffic in and out of the Concession and the Japanese turned on the water supply.

Light was cut off in the foreign areas on January 15, owing to the Hankow Light and Power Company suspending operations through lack of coal. The Japanese military authorities are keeping their promise to supply 1,000 tons of coal every month to the Company, according to a Reuter report of January 15. They seem to be experiencing difficulties, however, owing to the insufficiency of the loading capacity of the incoming vessels.

Sir Hughe Knatchbull-Hugessen, former British Ambassador to China, has been appointed Ambassador to Turkey. He was seriously wounded in August, 1937, when his car was attacked by Japanese airplanes, and it was predicted at that time that the wound would end his career. In March last year a grant of £5,000 to him was included in the Foreign Office Supplementary Estimates passed by the Parliament. Mr. R. A. Butler, then Under-Secretary for Foreign Affairs, admitted in the House of Commons that the grant was unprecedented.

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America's gift of wheat to China was brought to Shanghai on January 11 by the U.S. Maritime Commissions freighter *Sawokla*. The inscription on the bags, which numbered 16,000, or about 1,000 tons, read: "Cracked Wheat: Gift of the People of the United States of America to the people of China through the American Red Cross." In addition to the grain, the ship brought a large assortment of medical supplies for the relief of the Chinese refugees.

The reports that China had placed an order for 200 new bombers with the Bellanca Aircraft Co. were confirmed in Washington, and it was learned, on January 13, that proceedes from the sale to China of these bombers valued at $8,500,000 would be used to expand the company's plant to provide facilities for the mass production of military aircraft.

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The order was a cash transaction and not connected with the recent loan to China by the Export and Import Bank. The details of the contract, which was signed on January 12 by Dr. Leonard Hsu, Councellor of the Chinese Embassy, revealed that a number of the planes would be delivered within sixty days from the receipt of the contract and Chinese letter of credit, and not less than 25 or more than 50 planes will be delivered each month thereafter until the contract is fulfilled.

According to records of the Munitions Board, the order is one of the largest ever placed in the United States by a Far Eastern Power.

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A Chinese report reaching Shanghai around January 16 to the effect that the principal and interest of the various Government bonds, the drawings of which have been held twice a year, will be paid only in Chungking hereafter has caused a stir in Chinese banking circles in Shanghai.

Payments will be made only in Chungking in order to prevent legal tender notes from entering occupied areas in large quantities, it was reported.

Although no great confusion was witnessed in the Government bond market, the report affected it to a considerable degree, and prices have dropped.

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A Japan-Siam friendship flight will be attempted by the Japan Air Transportation Company, according to a Domei report from Tokyo. The plane to be used is a Heinkel 116 bought from Germany last year. It will start from Tachikawa near Tokyo on the early morning of January 25 and arrive at Bangkok on the next day, stopping at Taihoku, Formosa, on the way. The distance is 4,900 kilometers.

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It was reported on January 4 that the Japanese Consul-General at Shanghai had lodged a protest with the United States Consul-General against the operation of the Globe Wireless Company, an American firm.

The Japanese protest was understood to have been based on the fact that the license under which the Company operates was obtained from Chungking, that is, the licence was obtained from the National Government more than a year after it ceased to function in the area around Shanghai.

It may be recalled that radio broadcasting was a nationalized enterprise under the National Government, whose full right to control radio even within the foreign areas in Shanghai was recognized a few years ago with no dissenting voice.

It must be admitted that the National Government still exists and is the only recognized Government of China. But it is a well-established rule in International Law that the occupant acquires a temporary right of administration over the territory and its inhabitants, so far as the occupant actually exercises authority, and the legitimate Government is prevented from exercising authority, and occupation as such can exist whether war is declared or not. If the National Government had the right to control radio broadcasting in foreign areas in Shanghai, the Japanese military authorities may take that right over if they so desire.

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Hongkong exports and imports reached a record level in 1938, but declined sharply in December after the Japanese invasion of South China, official statistics revealed on January 18.

The statistics showed that trade with China established a new record reaching Hk.$463,991,816, an increase of Hk.$62,269,645 over 1937.

It is interesting to note that bullion export from Hongkong, mainly to the United States and Britain, amounted to $188,123,656, and that imports, mainly from China, totalled $9,601,218, mostly in gold and silver bars believed to have been handled on behalf of the Chinese Government.

* * * * *

A lengthy Havas report from Moscow dated January 14 gives an interesting review of activities in Soviet Russia in 1938. The report says that the year 1938, as previous years, was taken up with "liquidation of the effects of sabotage," and "extermination of the peoples' enemies," and described the trials and mysterious disappearance of many prominent men, including Marshal Vasilii Bluecher, known under the pseudonym of General Galen in China, Commander-in-Chief of the special Far Eastern Army. It said: "Especial interest was attached to the disappearance of Marshal Bluecher since he was practically Viceroy of Far Eastern Soviet Russia. It was also noted that he passed out of the spotlight even while the Lake Khassan incident in August was still making the headlines of the world's Press, shortly after the flight to Manchoukuo of General Lioushkov, head of the Far Eastern Ogpu."

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The total exports when compared with those of the preceding year for the same period shows sharp declines of 561,764,000 square yards and Y188,395,000. This is certainly a most discouraging outcome for this country which has ranked first in the world since 1934.

Causes for the decline are many, including the stricter import control of raw cotton and the so-called link system to adjust the import of raw cotton and the export of cotton cloth or cotton-made articles, but the major one is the wholesale abatement in the purchasing power abroad due to the world-wide depression. What is noteworthy in this connection is the fact that the sharp decline is greater in value than in quantity as is indicated in the unit prices per square yard given below in terms of yen:

	1938	*1937*	*1936*
Grey	0.140	0.184	0.148
Bleached	0.167	0.193	0.164
Processed	0.209	0.154	0.208

Exports to countries other than Manchoukuo, China and Kwantung Province classified by the kind of manufactures in terms of 1,000 square yards for quantity and Y1,000 in value are as follows:

(As of December 25, 1938)

		Comparison in per cent against same period 1937
Grey		
Quantity	655,554	3.6
Amount	91,901	16.0*
Bleached		
Quantity	410,658	28.0*
Amount	68,391	37.4*
Processed		
Quantity	693,472	33.8*
Amount	145,071	43.6*

*Mark denotes percentage of decrease

An American Looks Through the Open Door

THE charge that is bandied through the public prints so often these days, that Japan is closing or has closed the Open Door in the Far East, is to be traced to two sources, both directly interested. Primarily the complaint about Japanese activities in the Asiatic commercial field comes from American and other Occidental business interests and organizations that are located in China. These interests unanimously, and more or less indignantly, declare that Japan has closed the Open Door in Asia, and this charge is echoed in the flow of public statements of British diplomatic spokesmen.

In the face of this high tide of criticism, which appears to be accepted at face value by populations overseas, the Tokyo Government continues to reiterate that the principle of the Open Door in Asia has been upheld, and that the Open Door has not been, and will not be closed. Is it possible to get at the actual truth—to discover a mean of actuality between these two extremes of opposing viewpoints? The basis of the charge made by American and other business concerns in China is in what has happened to them through recent times. They have seen the activities of their several enterprises hampered and restricted, their volume of trade dwindle, and their profits vanish with the march of events in Asia through recent years. That is why they charge that the Open Door has been closed. This charge wins the support of British diplomatic spokesmen because this is directly in line with high international policy of the British Government. Americans seemingly do not know, or have forgotten, that the American Open Door policy is a purely British concept. It was an instrument of immense value to the American Government of forty years ago, in another part of the world, when American interest in China was negligible.

The Tokyo Government understands quite well what has been taking place in China, and this Government is informed, too, about business conditions in China in general. The Tokyo Government, however, continues to insist that the principle of the Open Door in China is not being violated. The basis for this Japanese contention is to be found in the trade reports through the past decades.

It is commonly believed overseas, and believed implicitly by Occidental traders in the Far East, that wherever Japan penetrates Occidental trade vanishes. How much actual truth is there in this commonly accepted belief? If the questioner is to take a nationalistic viewpoint and be governed by the record of the past he will find difficulty in escaping from the plain conclusion that Japanese penetration has always brought in its wake increased foreign trade.

Out of the Record of the Past

In 1903 the United States sold to Korea goods to the value of $199,188. In the following year, when Japan has attained a commanding position in the peninsula, American exports to Korea rose in value to the total of $906,557. Three years after the Japanese annexation, in 1913, American exports to Korea were valued at $3,920,000. In 1936 the United States sold to Korea goods worth Y9,154,000 in addition to exports from the Philippines into the country to the value of Y620,000.

About the same thing happened in Shantung province in China in the short period of Japanese occupation there between 1916 and 1922. When a Japanese administration reversed the German policy on the Shantung Railway in the five years from 1916 to 1920 it purchased from overseas $10,397,000 worth of machinery and materials. Of this total about one-third, or $3,047,000 went to American manufacturers. In 1921 this same railway administration bought from abroad, mostly from the United States, an immense quantity of rolling stock and equipment, including 18 locomotives, 293 thirty-ton coal cars, 11 passenger cars and other items. After Japan left Shantung, in 1923, this trade degenerated, then vanished.

In Manchuria the record is even more arresting. Before the advent of the Japanese, American exports into that part of the world, confined to a small quantity of cotton piece goods, were negligible. The railways had been built and equipped entirely with Russian materials. Between 1907 and 1919 the South Manchuria Railway alone bought American materials to the value of $93,790,000. It is to be noted here, too, that the South Manchuria Railway paid on the nail for these purchases, and in this same period the whole of China bought considerably less railway equipment than this single company and has not yet paid for much of what was then bought. In this same period, in addition to the purchases from the United States of the South Manchuria Railway, other Japanese concerns imported American machinery and materials to the value of $60,000,000, making a total for

MYSTERY OF THE ORIENT

Official United States Government figures for the first half of 1937, before the beginning of the Chinese war, tell this tale:

The United States sold to Japan, $165,000,000; to China, $31,000,000 (More than five to one to Japan). The United States bought from Japan, $106,000,000; from China, $60,000,000. Our favorable trade balance with Japan, $60,000,000, or twice the amount we sold to China. Our unfavorable trade balance with China, $30,000,000.

Japan bought 60 per cent more than she sold to us. China bought 50 per cent less than she sold to us.

Sales to Japan increased over 1936 more than two and one-half times the average increase to ALL our customers in the world. Recent Japanese import restrictions affect virtually none of our sales to her. Japan is our third best customer; China, fifteenth best customer. Japan is fourth best supplier; China, our ninth best supplier.

The whole of South America combined bought $138,000,000 from us, compared with the $165,000,000 worth Japan bought from us. In other words ALL the South American nations combined bought $30,000,000 less United States goods than Japan alone. Japan bought as much as ALL South America and CHINA combined—and yet Washington blandly emphasizes we are doing a tremendous business in South America.

Leaving the fancy talk about morals out of the picture, is it good business to kick your third best customer out of the front door? If so, then for what reason? If it is to protect our trade with China, there is no indication anywhere that that trade is being hurt—on the contrary, it is increasing at the moment—and what's more, it is a raindrop in a thunder-shower compared to our Japanese trade.

Our investments in Japan are twice those in China. Most of Japan's sales to us are non-competitive raw products, such as silk. It does compete in toys and notions, again a pinprick in a pincushion when it comes to percentages in total business. But the mystery is, if no one is shutting any door in China, the United States would be most hurt by embargoes and United States taxpayers would pay the bills. Certainly no United States business man is sucker enough to throw over a $271,000,000 business in exchange for a $91,000,000 business.

Why then is the State Department hollering about protecting our interests there and trying to sell the bogey that unless United States citizens do something to stop the war in the Far East we'll all be ruined? I'll give you a tip! The State Department is run by Messrs. Norman Davis, Bill Bullitt, Sumner Welles & Co. All of them have latchkeys to Great Britain's Foreign Office. Great Britain stands to be the big loser in the Oriental War—not the United States.—By Boake Carter, in the *New York Daily Mirror*.

the twelve years of $153,790,000. In 1920 alone the South Manchuria Railway paid out $20,000,000 for American made materials. In the twenty-two year period ending March 31, 1929, the South Manchuria Railway bought from abroad $251,000,000 worth of materials and of this total the United States supplied 26 per cent. Of the entire rolling stock then operated by the company 482 locomotives, 6,574 freight-cars and 440 Pullman sleepers were of American origin while practically all the steam shovels, cranes and dredges are of American origin, and no less than 90,000 tons of American steel rails were used for tracks. Thus, originally, was the Open Door closed against American goods in Manchuria.

How the Door is Kept Closed

It is fair to examine the situation to learn if trade trends adverse to the United States have developed since the founding in 1932 of the new Empire of Manchoukuo. The total amount of import business in Manchoukuo has risen from Y301,068,000 in 1932 to Y887,412,000 in 1937. **In this same period the volume of sales of goods from the United States to Manchoukuo almost tripled, increasing from Y20,068,000 in 1932 to Y57,523,000.**

Assuredly, and properly, Japan will use to full advantage her geographical position and her manufacturing efficiency to win as much trade in China as she can, but the simple truth is that Japan does not possess the resources to supply the vast needs in China; she cannot drive foreign business from China. Her advances on the mainland never have meant a loss of trade for other Powers. Her penetration into new territories has had the effect always of enhancing and increasing the trade of other powers and the betterment of populations involved.

The argument that Japan's exports into Manchoukuo completely overshadow the exports of other Powers can have but little value when it is remembered that, aside from the advantage of Japan's geographical position, her actual investments in Manchoukuo aggregate Y3,400,000,000. Of this total Y2,928,716,000 has been poured into the new State by Japan within the past six years. One may wonder when she may hope to discover anything on the credit side of the ledger. The security so dearly purchased to-day is menaced directly. Compared with Japan's position in Manchoukuo, British and American investments there were recently placed at Y39,600,000 and Y26,000,000 respectively. It is inevitable for obvious economic reasons that Japan, more favorably situated than other powers, should have a relatively larger trade. The same principle applies anywhere else, for example, in Cuba or in Panama. One has not heard any Japanese making an outcry about the "closed door" of Cuba or Panama, although the Japanese trade with those countries is small.

Views that certain American newspapers have been presenting recently carry the warning that the United States Government should not permit itself to be thrust into the leadership of any active moves in support of the Open Door in China. The United States Government had a valid reason for enunciating this doctrine forty years ago. The only reason the United States has to-day to support the doctrine is purely idealistic, because for the United States the Open Door can be seen only as an economic illusion. The record since the turn of the century discloses that for every dollar American traders take out of China annually the Nation annually sends back seven in one form or another. The American stake in China is completely dwarfed by that of Great Britain in a ratio of about eleven to one. From the British viewpoint, with these vast British commercial and other holdings endangered, it is again to-day, as was the case forty years ago, highly desirable to bring about a situation in which the United States may be induced to take action in the Far East. Hence one reads of the recent visit to Washington of Anthony Eden, an event reminiscent of other British visits to the States shortly before the United States went into the World war. This sort of thing is just A-grade publicity work at its topmost pinnacle, performed by the world's greatest experts.

Tracing the Beginnings

To get the broadest viewpoint of the whole question of the Open Door and to make some "then and now" comparisons the ideas of a distinguished American authority may be presented. Dr. Tyler Dennett, until recently Professor of International Relations at Princeton University, and at present on a tour to Australia, several years ago wrote a brief but illuminating article on this subject for *The Annals of the American Academy of Political and Social Science*. The essential portions of this article are given here as follows:

* * *

The open door policy, like babies, began small and grew bigger from year to year, but we need not stop to trace its growth. It was as essentially an intervention policy when it was small as a baby is human as soon as it is born.

In the latter part of the last decade of the last century, the American Government abandoned, as concerns the Far East, the traditional doctrine of the Two Spheres. There had been small interventions in earlier years (Perry's Expedition is difficult to classify as anything else), but for the most part these movements had been mere gestures. In July 1898 we acquired Hawaii, thus bringing to a logical conclusion a Hawaiian policy which was formulated at least half a century before. That was the first step. A few months later we demanded and secured the Philippines. That was the second step—a clear case of intervention outside the Western Hemisphere. The third step was the Open Door Notes of September 6, 1899.

The object of these notes was to pledge all the interested powers to acquiesce in equality of certain trade and commercial privileges, as between themselves in China. This equality seemed to be threatened by the recently asserted claims to spheres of influence and interest. Specifically the threat issued chiefly from Russia, although Germany's intentions were not then perfectly clear. Geographically, the Open Door Notes were drafted with Manchuria and North China chiefly in mind. The objective was to place an obstacle in the way of Russia's closing the Manchurian and North China markets.

It has for some years been believed that the Open Door Notes were drafted not by John Hay who signed them, but by W. W. Rockhill, who at that time was Director of the Bureau of American Republics, but who also served informally as Hay's technical adviser on the Far East. This belief as to the authorship of the Notes may be correct, but the authorship of the policy should be credited to still a third party, not an American at all—Alfred E. Hippisley, a British subject, a friend of Rockhill's, who had served for some years in the Foreign Inspectorate of Chinese Maritime Customs under the famous Sir Robert Hart.

British Influence on American Government

Several times in the preceding eighteen months the British Government had sought to interest the United States in intervention in China. The object of British alarm was Russia. The first suggestion was contained in a note from the British Embassy, March 8, 1898, which Pauncefote was requested to deliver personally to the President. The reply was a prompt rejection. The second suggestion came from Ambassador Hay in the following June. Hay wrote a personal letter to President McKinley, which the latter referred to Secretary Day. The Secretary replied to Hay, July 14, 1898, again repulsing the idea. A third proposal was made the following December. Lord Beresford made a fourth.

Late in July, 1899, after having already had a conference with Hay, Hippisley wrote to Rockhill:

> I venture to suggest that the United States lose no time in calling the attention of all the powers to the changes now taking place in China, and, while disclaiming any desire on her part to annex territory—(in ?) express (ing) her determination not to sacrifice (for ?) her annually increasing trade, any of the right and privilege she has secured by treaty with China: and, to assure this end, that she obtain an undertaking from each European power that all the Chinese treaty tariff shall without discrimination apply to all merchandise entering its spheres of influence; and that by any treaty, ports in them shall not be interfered with.

Here, not very felicitously expressed, is the substance of the Open Door Notes.

When some one, probably Mr. Adee, objected that such a course would expose the Administration to the charge that it was merely pulling British chestnuts out of the fire, Mr. Hippisley replied, August 16, that it would be better for the American Government to lead than to follow England. There seemed to him to be only the two choices. He said:

> I don't for a moment believe that the American manufacturers will sit by with folded hands and see these districts closed without making an effort to retain them. Pressure will therefore be brought to bear upon the Administration and it may have no option but to take some such action as I have suggested.

Secretary Hay was convinced and immediately requested Mr. Rockhill to draft a memorandum on the subject. In another three weeks the famous Notes were on their way.

The motive of the Open Door Notes was the desire to devise some peaceful method to check Russian political and commercial advance in North China. British and American trade were jointly involved, but with this difference, that American commercial interests were largely prospective, while British interests were actual.

There is neither the time nor the necessity to follow through the resulting correspondence with the powers, although it may be observed that Hay never secured such an agreement as was claimed. I merely pause to observe that the Hay notes fitted into a pattern of intervention which had been repeatedly urged by the British Government for a decade.

The Integrity of China

Nine months later, faced with the immediately threatening prospect that Russia would take advantage of the Boxer uprising to conquer North China, Secretary Hay put out the circular of July 3, 1900. This document set forth the principle of the integrity of China as a matter of international concern. This new doctrine, so like and at the same time so utterly unlike the doctrine of Article X of the Covenant, was an essential supplement to the open door doctrine. Without the second doctrine, the first could never mean much. The area within which the open door is to be applied must be defined and protected.

Again John Hay announced that his doctrine was accepted by the powers, but the facts were quite otherwise. Actually no power, with the possible exception of England, accepted the doctrine and the Department of State never had in writing the pledge of a single power to respect the integrity of China. Whatever respect was paid to it was due to the fact that the American Government had a military establishment at Manila, a fleet in the Far East, and five thousand troops in China. The integrity-of-China policy was a policy of intervention.

Three months later came the test. Would the American Government sustain its position as to the integrity of the Empire by keeping its troops in China? The United States was in the midst of a political campaign. The Democrats were attacking the Republicans for their imperialistic policies. The Republicans were, as usually in August of a presidential year, in a funk. President McKinley, candidate for re-election, was scared. He decided to withdraw the troops. Secretary Hay protested. To Adee, the Secretary wrote:

> The inherent weakness of our position is this; we do not want to rob China ourselves, and our public opinion will not permit us to interfere, with an army, to prevent others from robbing her. Besides, we have no army. The talk of the papers about "our pre-eminent moral position giving us the authority to dictate to the world" is mere flapdoodle.*

President McKinley persisted in his policy. By the end of the year the troops had been reduced 60 per cent, and a few months later they were reduced to a legation guard. The policy of American intervention in China had been abandoned. Why? Because the American people would not support it.

Public Opinion Contrary to Intervention

From 1902 to 1932, thirty years, the pattern has been repeated with almost mathematical regularity; first intervention, then withdrawal; interference, non-interference. In each instance it has been the apathy or the hostility of American public opinion that has led to the abandonment of the policy of interference. Americans are a funny folk. They applaud lofty moral sentiment but they are rarely ready, outside of the Western Hemisphere, to take the next step, to make effective the sentiment which they applaud. The time comes when they are asked to put up or shut up. They do neither. They will not put up the force without which sentiments in this wicked world are still sentiments only, but neither will they shut up. They keep on talking about the sentiments as though wishes were horses.

In 1922 the American Government took a step which rendered a policy of intervention in Asia impossible for fifteen years, and very difficult thereafter. The motive appears to have been that American interests in the Far East, while considerable, were not worth fighting for. If they could be conserved by agreement, well and good; if not, at least they were not worth the cost of preparedness to defend them.

We have just been passing through another chapter in this spasmodic policy in the Far East. Again we have embarked upon a policy of intervention, with high moral sentiments, the defense of the peace machinery. The American people have responded as they did to John Hay's Notes on the Open Door. But soon will come the test: shall we put up or shut up? Probably we shall again do neither.

Indeed, the test has already come. What other meaning can be read into the passage of the Hawes-Cutting Bill over the President's veto than that the American people are apathetic to a policy of intervention? And if four Presidents cannot secure an affirmative vote in the American Senate for even so mild a measure as American entry into the World Court with five reservations and two understandings, what prospect is there that the people who elect those Senators will adopt more effective measures to sustain in the Far East the interventionist policy of the last Administration?

I do not argue on one side or the other as to the rightness or wrongness of the policy. Sometimes I think such words are indecent on the lips of historians. I merely point out that we are following a pattern already old in the Far East.

Explanation of Policy of 1898-1902

May I return very briefly to the policy of 1898-1902. I have already pointed out how the American people responded to the first intervention in the Far East as a great ethical policy. We would free the downtrodden Filipinos from the blight of the Spanish rule and the Roman Catholic friars. We would "save China." I have already hinted that there was another motive, represented by the fact that the Open Door Notes were suggested by an Englishman, and served, as Mr. Adee pointed out, to safeguard more British chestnuts than American. I should like to follow this a little farther.

Many times in the last twenty years, efforts have been made, to prove that, at the turn of the century, the American Government made secret engagements with Great Britain which looked in the direction of an alliance. There was such an engagement in 1905 with Japan, though not directly with England. In 1898-1902 there was no such agreement in written words, but I call your attention to what happened.

When John Hay returned from the Court of St. James in September, 1898, his major problem was to secure the retirement of England from the Caribbean. The American Government had determined to become in that area the paramount power. This purpose was accomplished in the next three years. England was displaced in a region where she had exerted the paramount political influence for many generations. It is not a principle of British statecraft to give up something for nothing. Where there is a *quid*, you may always expect to find a *quo* if you look hard enough. What, then, did England get in return for her retirement from the Caribbean?

The answer is fairly obvious. The United States could *yield* nothing to England. The Irish and German voters would have punished any political party that would have made such a concession. "Take and no give" is always the maxim of a foreign policy under democratic control.

The McKinley Administration could give nothing to England, but it could retain the Philippines—an advantage to England; it could write the Open Door Notes, a second advantage to England; and the note of July 3, 1900, about the integrity of China. Beyond that point it could not go. It could not maintain in China a military force to join with England in opposing Russia; but before this became evident, England had returned the compliment by yielding to the United States in the Caribbean. England got out of the Canal area; the United States got into the Far East. There was

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*Dennis, A. L. P., *Adventure in American Diplomacy 1896-1906*, New York: Dutton and Co., 1928, p. 258.

no secret agreement, but rather merely an extraordinary coincidence of events in two widely separated parts of the world.

The association of these two political changes seems to supply the facts by which the original American policy of intervention is to be explained. Our Far Eastern policy was, in fact, a part of our Caribbean policy. Our interests in the Far East were not exclusively humanistic or chivalrous. We got something material in return.

Reasons for American Intervention in Manchuria

Now let us come back to the Far East of 1933. What interests of the American people are to be served by a revival of the policy of intervention? There are two answers being offered to this question.

The first answer is that of Colonel Stimson, that if the so-called peace mechanisms devised in recent years can be sustained and vindicated, the American people may expect to share in the benefits with all the world. That explanation is very similar to the one which was offered more than thirty years ago, that if the open door and integrity of China could be maintained, the world would be spared another war and Americans would share in the benefits of peace.

The second explanation of our most recent policy of intervention is that we have a material interest in the markets of Asia, which must be conserved and protected. This explanation also has a familiar ring. It was offered in 1898, 1899, and 1900. In those days, however, there was a second material interest—in the Caribbean—which far outweighed any actual interests in the markets of Asia. The latter were for the American merchant more prospective than real. The same answer may be given to-day as to the markets of Asia, while we have to confess that there is nothing to-day to add to the trade advantage comparable with what McKinley and Hay obtained when England yielded to the United States in the Caribbean. It was therefore easier to defend the Hay policy on grounds of actual material interest than it is to defend the Stimson policy. In those days the Americans received not only prospective benefits but valuable considerations in hand.

The Issue Defined

It has not been my purpose to follow this line of thought farther than to catalogue the two policies of intervention and non-intervention in the Far East, and to add to history some minor footnotes which are now available for the first time. Nor is it necessary to carry the thought farther. There are still the arguments for intervention, and the other arguments which led the American Government in 1922 to ratify the non-fortification agreement with Japan and thus cast their lot against intervention. You may take your choice. I merely ask, therefore, that whichever be the choice, you do not confuse the categories. The policy of the open door, of the integrity of China, and its newer cousin, the non-recognition of "any situation, treaty, or agreement which may be brought about by means contrary to the Covenant and obligations of the Pact of Paris," while apparently as pacific and humanitarian as the Sermon on the Mount, are in fact no more so than the Bill of Rights and the Declaration of Independence, for both of which much blood had to be spilt.

If, on the other hand, you support the Stimson policy because it seems calculated to serve American material interests in the Far East, do not forget that in 1898-1902 we played for a bigger stake than now. The open door and integrity-of-China doctrines were more in the nature of slogans than of money-makers. They never yet have made many American millionaires, though they have made many American bankrupts and paupers. But we did win something—the paramount position of the United States in the Caribbean. What comparable actual material interest may we expect to win to-day?

Mr. Wang Ching-wei's Peace Move

By TSURUMATSU OKAMOTO, Assistant Editor of The Tokyo Asahi

DESPITE all official statements and declarations to the contrary, it is undeniable that a number of the statesmen composing the Chungking regime are anxious for peace. They realize how vain and hopeless the so-called long resistance must be. The only faction in the ruling class at Chungking opposed to an early restoration of peace is that of the communists and their associates who foresee loss of their grip on the Chinese population which is only to be maintained through prolongation of hostilities.

It has followed, therefore, that the Kuomintang Government has become divided into pro and con factions over the long resistance policy. Mr. Chen-cheng and his followers in collaboration with the Reds advocate continuation of hostilities against Japan, while Mr. Wang Ching-wei and his henchmen represent a moderate section ready to enter into peace negotiations with Japan on terms acceptable to China.

It is unfortunate that Mr. Chen and his followers in their eagerness to resist Japan's onslaughts at any cost, tacitly have allowed the communists gradually to invade the Kuomintang on the pretext that the communist party now professes democracy in order to ensure a united front of the oppressed races.

The Chinese communist party and the communist army form two sides of a shield. Although the appellation "communist army" has disappeared since the Red troops were organized into the Eighth Route Army last August with General Chu Te and General Peng Te-hsi as Commander and Vice-commander, yet practically it has remained a pure communist army of Russian pattern, and even General Chiang Kai-shek cannot control it as he wills.

Part Red Forces Play

General Chiang Kai-shek knows that the Red colleagues have an ulterior motive in their co-operation with the Kuomintang, but he prizes their military help so much that he feels he must have it at all costs. Is he not placing too great reliance on their assistance?

The only tactics the red forces employ are guerrilla warfare. It is generally believed that they resort to these tactics because they excel best in them. Nothing is farther from the truth. It is to be remembered that in the fighting at Ping Chingkwan, Shansi Province, last October, the Red Army met with great reverses and suffered an irrecoverable loss both morally and materially. Since then their strategy has been noteworthy.

In view of the fact that their tactics have little value in checking the Japanese forces, guerrilla warfare may be said to be more political than strategic, for while it enables the red forces to avoid positional warfare with the Japanese, it proves the best possible means of propagating communism among the populace. This may account for the circumstance that the communists will not obey orders of the Kuomintang Military Committee to meet frontal attacks of the Japanese forces.

Thus a deep cleavage has been cut in the organic whole of the Kuomintang regime—between the moderate elements of the party and the radicals, including the Communists. These factions failed to agree regarding the defence of Wuhan, and the merit or demerit of the scorched-earth policy, which culminated in reducing Changsha to ashes.

It was at the conference of the Anti-Japanese Revolutionary League held in November last that Mr. Chang Chun-wei, leader of the National Socialists, impeached the communists on the ground that the communists were responsible for the establishment of an independent administration in the North-western districts, placing communist officials in important posts, and taxing the populace without the knowledge of the Central Government. As a matter of fact, the closer rapprochement between the radicals of the Kuomintang party and the communists has resulted in isolating the right faction.

The Opposing Elements

The communists and National Socialists are ideologically opposed, and the anti-Japanese movement has only forced them to bury hatchet for the time being. The activities of the communists for expansion of their influence, however, have awakened the ire of the Right Section members. This was the first visible symptom of the rift between the right and left sections of the party.

A second and more significant symptom was to come. The opportunity came when the former Japanese Premier, Prince Konoye, made a historic statement on December 22, reiterating Japan's real intentions as regards the prosecution of hostilities. It was Mr. Wang Ching-wei, Deputy General Executive of the Kuomintang, who grasped this opportunity. He left Chungking with a few followers and went to Hanoi where he made a declaration proposing a peaceful solution of the incident.

The Kuomintang Regime was taken aback by Mr. Wang's peace move, and sought in every way to conceal the internal dissensions of the regime. It was disclosed that Mr. Wang's move had the tacit understanding of moderate and anti-communists elements of the Kuomintang party, that held the opinion that continuation of further resistance was impossible without undermining the structure of the Kuomintang regime. Under the circumstances, the Kuomintang Government failed to take anticipated measures against Mr. Wang.

General Li Tsung-jei, and General Pei Chung-hsi threatened to declare independence of the Kwang provinces ; General Lung Yun of Yunnan Province did not respond to an order from Chungking to recruit fresh troops to be sent to the front. General Wang Tsuan-hui of Szechuen Province, General Wa Ting-chang of Kweichow Province, General Lin Wen-hui of Hsikang Province and Mr. Kung Hsiang-hsi and other moderates with Mr. Chang Chun as leader seem to be showing a disposition to accept Mr. Wang's peace declaration in principle.

Chiang's Difficult Position

The Kuomintang Party excommunicated Mr. Wang, and deprived him of all his official posts, but does not move to arrest him lest the party's disunity should be brought to the highest pitch. It is reported that General Chiang Kai-shek at the conference of the Central Executive Committee advocated very liberal treatment for Mr. Wang. That is to say, he advised that at first friendly counsel should be given and then a warning before they expelled him from the party. This fact eloquently reveals his difficult task of holding the balance between the two opposed factions.

Now General Chiang Kai-shek is doing his best to pacify the population and restore confidence in the Kuomintang Regime by assuring them of their unflinching determination to continue resistance against the Japanese invasion. He recently invited political leaders of the south-western provinces, obviously intending to placate them. General Chiang's desperate attempt to patch up the situation can, however, be of little avail, because, through the support of Sun Fo and Feng Yu-hsiang, the communists at Chungking have exerted their political influence to such an extent that the Generalissimo has become but a puppet of the Communist leaders Chou En-lai, Mao Tse-tung, etc. Under such circumstances General Chiang Kai-shek's strong attitude towards Japan is more apparent than real. Meanwhile the Communist party has assumed a less reticent attitude towards the Kuomintang.

Communist Demands

The following bombastic declarations have shocked General Chiang and various sections in the party.

(1) The Communist party demands immediate summoning of the fifth plenary session of the Chinese National Congress and its propositions should be included in the agenda. After the session a joint declaration of the Kuomintang and Communist parties should be issued.

(2) A statement explaining that Sun Yat-sen's three political principles are in actuality communist principles should be issued in the name of the Kuomintang after the session. The Communist leader, Chou En-lai, is now writing the statement in question, which will be sent to General Chiang Kai-shek for inspection.

(3) The communist party has formulated a plan for collecting cash by which the bank deposits of Chinese subjects will be utilized by the Government or be used as guarantees against exchange equalization funds abroad. According to an investigation now under way there are 23 major depositors.

(4) The Communist party demands a fundamental reshuffle of the Kuomintang and government personnel, the appointment to important government posts of Sun Fo and the leaders of the Eighth Route Army and other Communists.

It is thus to be expected that the time will come in the near future when the disguised communist party will throw off its mask. Sensing the impending situation, and being given an impetus by the action of Mr. Wang Ching-wei, moderate sections in the Kuomintang party are ready to effect a retreat.

One wonders if the general masses of China really grasp the true significance of Mr. Wang Ching-wei's peace move made in response to the Japanese ex-Premier Konoye's peace overtures of December 22. The situation within China can be seen as a collision of two groups. One group is a coalition of several sub-groups against the other group. The first of these sub-groups are British and other capitalistic states which would maintain the *status quo* of the Far East, and more especially of China, so that their rights and interests, i.e. fruits of their Imperialistic aggressive policies of past two or three centuries may be left untouched. The second sub-group is Soviet Russia which will not leave any stone unturned in order to bring China into the communist bloc. The third sub-group is the Chinese Kuomintang government which hopes to safeguard its own power by setting Japan and third powers by the ears. The other group opposed to the three sub-groups consist of Japan and those elements in China which are racially awakened and confront the sacred task of liberating Asiatic races from western bondage.

The above mentioned three sub-groups of states have effected a united front against the common foe, Japan, and the defeat of Japan means revival of strife between Soviet Russia and the capitalist western powers with probable victory for Russia. This would make a Communist state of China, and undermine the rights and interests of western powers in China.

Ideological Warfare

From a broader point of view the "China Incident" may be regarded as ideological warfare which will last, say, a century and even more. Being ideological warfare no middle course is permitted. Then a decisive war must be fought between Comintern and anti-Comintern groups. Mr. Wang Ching-wei's political foresightedness prompted him to side with the anti-Comintern cause. General Chiang Kai-shek is left in the plight of being bound by the pledge he was forced to give on the occasion of the Sian Incident in 1936, so he cannot assume the attitude of Mr. Wang, nor does his ideological conscience permit him to run to the colors of the communists. One prominent feature of Mr. Wang's coup is that it has placed General Chiang Kai-shek in an awkward situation. He can maintain his present political power as long as the united front is patched up by compromises of two opposing factions, but once this is broken either section would give him the highest place in its camp if he adopts the desired ideology.

The choice left to General Chiang Kai-shek is to cast in his lot with Mr. Wang Ching-wei or embrace communism. If he hesitates to take one course or the other he will fall between two stools. Mr. Wang Ching-wei's peace move has caused an abrupt change of the political situation of China. Indeed too much importance cannot be attached to this political gesture.

The Communist leader Mao Tse-tung in his report to the plenary session of the Communist congress held at Yunnan-fu in December last, reiterated the importance of long resistance in order to win final victory over Japan. But the only condition for successfully carrying on long resistance must be unbroken maintenance of the united front of the entire Chinese population.

Now that Mr. Wang's secession from the Kuomintang party has exposed the vulnerability of such a front, the communist party's boast about the long resistance strategy has less value than before.

General Chiang Kai-shek is not the only statesman to face the dilemma. Great Britain and other Western Powers who have given material as well as moral support to General Chiang Kai-shek's Regime must reorient themselves either on the side of the communist cause or on the side of the moderate faction of the Kuomintang, not to be found in Chungking in the near future. Their Chinese policy of maintaining the *status quo* for further exploitation of the land is the worst possible alternative of three courses, and has the least hope of success, for Sino-Japanese hostilities have entered a stage in which ideological warfare begins to play a more prominent rôle.

The issue of the present hostilities is that either China will be brought to accept the new order in East Asia or into the camp of the communists and so be added to the Federation of the Soviet Republics.

The Financial Structure of Manchoukuo

MANCHOUKUO has now only one sort of currency in circulation, all others being replaced by "Kokuhei" or the national currency issued by the Central Bank of Manchu and small coins, and one has no more to trouble oneself about how to dispose of notes received in order to escape loss from disastrous depreciation. There were in former days three provincial government banks, and one Frontier Bank. The latter was a private affair of the war-lords. These four banks had the privilege of issuing their own notes without limit.

Those banks of issue, besides transacting a general banking business, were also engaged in a variety of enterprises, including buying, selling, and exporting soya beans, and other staple products, flour milling, oil milling, brewing, marine transportation, forestry, mining, and what not. Of all these enterprises, bean transactions constituted the major part of their business, and a large volume of notes used to be issued in bean seasons to finance the purchase of this staple.

No effective measure was taken to arrest inflation, but, on the contrary, as any amount of notes could be issued according to requirements of the banks or the war-lords, with insufficient or no reserves to back note issues, their value depreciated in proportion to the rise in the volume of the notes. Thus most notes fell to between one-tenth and one-fiftieth of face values. Typical of these, were the Mukden notes, of which the circulation in June, 1929, reached the huge sum of 1,500 million yuan. Their value dropped to one-seventieth of face value at one time.

Further, there were special kinds of notes called "Ssutieh," issued by various prefectural governments, other public bodies and even by private houses. These notes circulated to a tremendous extent. Some of them gradually lost public confidence and finally were no better than mere scraps of paper.

How the System Worked

The banks were accustomed to buy beans and other cereals from farmers with bank-notes commanding comparative confidence in the individual localities. The farmers, at the time of such dealings, obtained considerable sums of money, but their joy was usually short-lived, for their notes depreciated rapidly and severely, and the farmers often were left with nothing but scraps of paper for their year's labor, presenting a tragic spectacle everywhere in the country. The distress to which the inhabitants were reduced under the old regime baffled description.

The cereals confiscated from the farmers in this unscrupulous manner were sold for silver or gold, so that the war-lords were enabled to purchase war materials, munitions, and other materials from abroad. When the depreciation of a note reached the last stage on account of inflation, it was usual with the bank authorities to devise the issue of a new kind of notes, and take up the old ones at greatly reduced values. This device was operated repeatedly with as many as 15 kinds of notes, involving 135 varieties. The currency system of the land was reduced to utter chaos, which debarred economic development by entirely prohibiting investment.

The first urgent business to be taken up by the new regime upon its inception was, therefore, the adjustment of the currency system. In June, 1932, the currency law of the state, the law pertaining to the Central Bank of Manchu, and the regulations governing the organization of the Central Bank of Manchu were promulgated. In the same month the Central Bank of Manchu was formally established by the absorption of the four old banks of issue and opened business on the first of the following month with paid up capital of 7,500,000 yuan out of the authorized capitalization of 30,000,000 yuan.

As stated before, as the old banks of issue had been extensively engaged in numerous enterprises, the appraisal of their assets and liabilities was not an easy matter. The appraisal committee, consisting of the Premier, as Chairman, Finance Minister, and experts to assist them, finally, set down the total deficit of the old banks at 30,000,000 yuan, which the Government decided to underwrite to the New Bank, which took over the whole business of the four banks of issue. Thus the Central Bank of Manchu floated indemnity bonds to the amount of the deficit.

Record of Progress

The position of the New Bank was further strengthened by the second call on its capital amounting to 7,500,000 yuan in July, 1933, bringing the total paid-up capital to 15,000,000 yuan. All the enterprises, owned by the amalgamated four banks of issue, have been disposed of, and the Bank's activity is now limited to proper banking business only.

It is prescribed in the currency Law that 23.91 grammes of pure silver in weight shall be the unit of monetary value to be called a yuan. No standard coin, however, is minted, and the notes issued by the Central Bank of Manchu are made legal tender. Although there are no provisions as regards the conversion of the notes, the Central Bank of Manchu is required to hold, as reserve, a sum not less than 30 per cent of the total amount of notes issued in gold and silver bullion, reliable foreign currencies and deposits with banks in gold and silver accounts. Inwardly the stability of the currency is maintained through the control of the note-issue, and also through purchase and sale of silver bullion, while the external value of the currency is maintained by means of foreign currency transactions.

By a special decree of the Department of Finance, the 15 different kinds of paper money issued by the four old banks of issue were declared valid for two years beginning from July 1, 1932, at rates fixed officially. The old notes taken over by the New Bank at its opening in exchange for the new notes of the Bank amounted to 142,234,881 yuan which represented the amount of the new notes issued by the Bank at the outset.

The old notes were thus gradually recovered, and were entirely withdrawn from circulation by the end of June, 1934. The amount thus recovered within the prescribed period reached 93 per cent. Although the old notes were to cease to be legal tender at the end of June, 1934, the government extended the period for exchange of old notes for new ones for one year, with a view to protecting the interests of those still possessing such notes. Thus the total finally recovered reached 96 per cent of the total issue.

Ma Chan-shan's Money

General Ma Chan-shan, who revolted against the new regime, to which he had avowed allegiance, established headquarters at Heiho, a town on the Heilungkiang River and committed all manner of atrocities, including the forced circulation of his own paper money. The issue of this money amounted to 2,000,000 yuan without any reserve at all. After the downfall of General Ma Chan-shan in 1933, the Government, in order to save the Heilungkiang people from disaster, decided to redeem Ma Chan-shan's notes at the rate of four yuan against one in national notes. The conversion was completed within a month.

When Jehol province was formally annexed to Manchoukuo in the Spring of 1933, the Central Bank of Manchu took over the business of the Jehol Industrial Bank, which had been the government bank of the Province, and had issued about 11,000,000 yuan in notes. Those notes were also recalled from circulation and redeemed.

There had been in circulation about 12,000,000 yuan of private notes of Provincial Governments called Ssutieh, at the time when the Central Bank of Manchu was opened. Their issue and circulation were prohibited by law. Their redemption, however, was carried out smoothly without trouble.

There were, further, two peculiar kinds of currencies circulated locally. One was "kuolu-yin," or better known as "Transfer Taels," and the other "chenping-yin," known as "Antung Taels." The former was a kind of receipt or warrant issued by silver smelting houses at Newchwang for silver deposited with them by export traders in the port, which had been the sole open port in Manchuria in former days. The issue and circulation of this currency was banned in November, 1933. The outstanding accounts in this currency among the silver-smelters at the time amounted to no less than 20,000,000 taels, and their adjustment presented no small difficulties.

Silver is Bought Up

Chenping-yin (or Antung Taels) were privately minted silver pieces or " Sycee " imported from Shanghai, Tientsin, Newchwang and other places, and used in Antung districts by traders for the purchase of staple products, and timber. A piece of sycee was worth 53.05 taels. A tael represented 525.54 grains of pure silver, and was money of account. The transactions in Chenping-yin were prohibited as from September, 1934, as were smaller silver pieces such as Mexican dollars, Hongkong dollars, and also demonetized Japanese silver yen. These silver pieces were bought up by the Central Bank of Manchu at prices fixed officially.

The redemption of all inconvertible notes of different varieties, and silver pieces being completed, the Central Bank of Manchu then proceeded to the adjustment of foreign notes. The most extensively circulated in the country were those issued by the Bank of Chosen, and the Yokohama Specie Bank, which were estimated at about 50 million yen between them. Other notes were quite negligible. By January, 1937, the issue of any foreign notes was prohibited, and by the end of the year they were wholly withdrawn from circulation. Thus the difficult task of currency unification of the country, which formerly had been regarded as utterly hopeless, was accomplished most satisfactorily by the Central Bank of Manchu.

As stated before, the new currency is based on silver and not on gold. The first important business for the new regime was the adjustment of a currency system in utter chaos, and for this purpose it was considered convenient to link the new currency to silver, which had been used as money in the country from time immemorial, and by and by to link the currency to the Japanese yen.

In place of innumerable varieties of notes and coins circulating in the land, there is now only one kind of notes, namely, the national currency issued by the Central Bank of Manchu, and small subsidiary coins.

Par Value Maintained

By the purchase and sale of silver and exchange on Shanghai and also by strict control exercised on the note issue, the new currency has always maintained par value with silver, and the system functioned quite satisfactorily until 1934, when owing to the silver adventure in the United States, the white metal soared causing confusion everywhere that this metal is used. Manchoukuo alone could not be immune from the consequences. The value of currency appreciated sharply, while commodities fell violently to the consternation of the people.

Manchoukuo was now put into the dilemma of choosing between severing its currency from silver in order to maintain stability of prices, or of keeping it linked to silver, subjecting prices of commodities to heavy fluctuations. The Government finally decided on the first course, also linking the national currency to the Japanese yen. This proved successful. Prices remained stable in spite of sharp appreciation of silver, and foreign exchange was well maintained. In September, 1935, par value was attained between the yuan and the yen.

On November 4, 1935, the intention to maintain parity between the two currencies was announced simultaneously in Tokyo and Hsinking. This step has immeasurably enhanced public confidence in the yuan, and at the same time has facilitated the flow of capital between the two countries greatly encouraging Japanese investment in Manchoukuo.

The Exchange Control Law

In co-ordination with Japan, Manchoukuo promulgated the exchange control law in November, 1935. The law was revised in October, 1937, and again in March last year, to further intensify the control. To make exchange control more effective, in August this year a special office called the " Exchange Control Bureau " was created in the Central Bank of Manchu, consisting of Government officers and staff of the bank. All funds in foreign currencies are to be concentrated in this Bureau, and banks engaged in foreign exchange transactions are required to sell to this Bureau foreign exchange that they may acquire ; and buy from the office such exchange funds as they may require from time to time.

In September the Government proclaimed the extraordinary law relating to the control of capital, which was put into effect on the first of the following month, and the Central Bank of Manchu is put in charge of operation of the law.

Unification of currency being achieved successfully, public confidence in the national currency is firmly established, and is welcomed even in Chinese Mongolia as well as in North China, and the Central Bank of Manchu, because of its monetary policy, is now collecting several millions in notes from those places each month.

The initial issue of the national currency which was made in 1932 upon commencement of business of the Central Bank of Manchu, was 142 million yuan, which steadily increased in consonance with the economic development of the country, and toward the end of 1937, a peak of 329.9 million was reached. Manchoukuo being prominently agricultural, money is mostly needed in the season when farmers bring their beans and other crops to market, and with the proceeds they purchase necessities for the coming year. Thus the note issue begins to rise sharply from about September, when merchants commence to make preparation for coming business activities. The top is reached about new year, and then begins to decline from about the middle of February, marking the end of the business season in the country. The issue falls to the lowest point in about June, when farmers are busy in the fields.

Last year the maximum issue was experienced toward the end of the year, when the circulation reached 340 million yuan, and 192 million in the middle of June marked the bottom for the year. The wide difference between maximum and minimum issues may be taken as a proof of satisfactory movement of commodities and smooth flow of the funds. Other factors besides agricultural have brought about the heavy increases in note issues. Among others may be mentioned the large spending by the Government for public works and for other special undertakings, and particularly the enormous rise of private enterprises of all sorts.

The Field of Finance

The Central Bank of Manchu is the sole bank of issue in Manchoukuo, established in 1932 with an authorized capital of 30,000,000 yuan, of which one half is paid up as stated before. The head office is situated in Hsinking and major branches are at Tokyo, Harbin, Mukden, Kirin and Tsitsihar, with 145 minor branches in different parts of the country, as well as in Peking, Tientsin, and other places in North China.

As banking has not yet been fully developed in the country, the Bank, besides functioning as a central bank, is engaged in general banking business, including receiving money on deposits, discounting commercial and other paper, making loans on real estates, money transfers and the like.

In former days people had no confidence in notes, which were certain to suffer violent depreciation. They were unwilling, therefore, to and did not care to make deposits with banks. As no deposits were available, no private banks of the modern type were possible ; those that existed were money lenders rather than banks in the modern sense of the word. Economic development was impossible under these circumstances.

To adjust this situation the Government enacted a new banking law in November, 1932, under which the banking business was subject to special license from the Government. Altogether 169 banks applied for licenses by the end of June, 1934, of which after due inspection of their business conditions and financial standings, licenses were granted to 88, including 65 native banks and 23 Chinese banks. For various reasons the Chinese banks gradually decreased in number, and at present there exist only five Chinese banks operating 25 branches.

Special Banking Groups

As a special bank, mention may be made of the Industrial Bank of Manchu, which was modelled upon the Industrial Bank of Japan. It was formed in December, 1936, by the amalgamation under the auspices of the Government, of the whole business of the branches of the Bank of Chosen in Manchoukuo, and two other Japanese banks which had been operating in the country. It has an authorized capital of 30,000,000 yuan of which one half is paid up. The primary aim of the bank is the supply of long term credits, the lack of which had long been felt keenly, but which in former days was considered impossible. As in the case of the Industrial Bank of Japan, the bank derives resources for business from the sale of debentures, which it is privileged to issue to an amount equal to fifteen times of its paid up capital. It is making prosperous business, operating 49 branches throughout important places in the country.

Under the old regime Manchuria had long suffered from lack of adequate institutions to take care of the financial need of the masses. Pawn brokers and private money lenders made exorbitant charges and were useless as credit organs for the masses. To fill this gap in the system, credit societies modelled after similar institutions in Japan have been organized in many places under Government auspices, and there are at present as many as 167 societies throughout the country. As for pawn shops, there are 1,029 and they still exercise considerable influence among the lower classes. The liang-chan houses are very peculiar institutions. Their proper business is brokerage in staple products, but as side business they generally finance agriculture, and some are even operating industries such as flour and oil milling, and spirits distilling. There are at present about 1,600 ling-chan houses.

As the last of the special banking groups we may mention the Manchu Colonization Co., the Manchu Real Estate Co. and the Oriental Development Co. The first named is principally concerned with the colonization of Manchoukuo by the Japanese immigrants, to whom the company supplies necessary funds. The Manchu Real Estate Co. makes it its business to finance the purchase or construction of houses in urban districts, and also to make loans on lands. The Oriental Development Company takes special interest in the development of the Korean immigrants in Manchoukuo.

March of Progress

Peace and order being completely restored to the land as never before been experienced, and public confidence in the currency being firmly secured, business activity is expanding. Both deposits and loans and advances are fast increasing. Thus the combined total of deposits in all credit organs at the end of June, 1938, amounted to 969 million yuan and that of loans and advances 930 million, being an increase of 32 per cent, in the former and 52 per cent in the latter, as compared with the figures for the same period one year before.

The reduction of the general level of money rates was what the financial authorities made a special effort to effect and for this purpose the Central Bank of Manchu has reduced its official discount rate repeatedly to a considerable extent. In many cases, the money rates in the land have thus been reduced to one-third or below as compared with those ruling in former days. Thus one important factor detrimental to the economic development of the country is now removed for the well-being of the public. The official discount rate of the Central Bank of Manchu is 4¾ per cent as revised on January, 1938, against 10.4 per cent ruling in 1932.

Below is shown a list of financial establishments in Manchoukuo as at the end of June, 1938.

Domestic Banks

Special Banks 2:
  The Central Bank of Manchu (Operating 149 branches)
  The Industrial Bank of Manchu (Operating 49 branches)
Commercial Bank 52:
  (Operating 179 branches amongst them)

Foreign Banks

Japanese Banks 8 (12 branches):
  The Bank of Chosen (2); The Yokohama Specie Bank (5); The Oriental Colonization Co. (4); The Bank of Taiwan; The Mitsui Bank, The Mitsubishi Bank, The Sumitomo Bank, The First Bank.
Chinese Banks 5 (25 branches):
  The Bank of China (12); The Bank of Communications (9); Chin Ching Bank (2); Tatung Bank and the Jung Lai Bank.
Western Banks 3 (6 branches):
  National City Bank (2); Hongkong & Shanghai Banking Corporation (3); Chartered Bank.

Credit Organs For The Masses

Credit societies, 167. Pawn Shops, 1,029.

Special Financial Groups

Liang-chan (staple products brokers), 1,600
Mujin (mutual benefit societies), 15
Insurance companies, 2
Real estate company, 1
Colonization company, 2
Clearing house, 4 (Hsinking, Mukden, Dairen and Yinkow.)

The Yunnan-Burma Highway

As the rainy season and the monsoons are practically over, says *The Malaya Tribune* of November 19, it is highly probable that improved communications between Burma and Yunnan will exist, and it is hoped that, before the next rainy season arrives, the draining of roads will be sufficiently advanced to avoid landslides and washouts.

On the Burma side of the new highway, there are two very capable British road engineers; Mr. Farquhar-Tate, at Bhamo, and Mr. Eccles, at Lashio. In addition, Mr. Fogerty, the British Commissioner for the Shan States, is sponsoring in every way the improvement of communications in every sense of the word.

At present, the railhead used is at Lashio, which is on a branch line from Mandalay and some 300 miles distant.

The other railhead is at Myitkyma, the latter as far as communication with China is concerned, had to be abandoned as the terrain between it and Tengyueh, in Yunnan, is so low lying and liable to flood that it was deemed unwise to build a road, and, further, considerable amounts of stone would have to be transported.

From Lashio to Muse, the Chinese border, there is a road which is steadily being improved and metalled for a distance of nearly 280 miles.

Between Muse and Kunming, a distance of some 500 miles, a road is being made, continuous work is going on and it is reported that as many as 60,000 laborers are employed on this project.

But it must be remembered that practically all unskilled labor is used and the modernity of their machinery is extremely limited.

As an example of this, in order to blast a large rock, extensive fires are placed against it, at an appointed time cold water is thrown at the rock and the stone cracks. Apparently if they are given dynamite, they have other uses for it.

Reliable information indicates that between Lashio and Yungchang, the roads in no case passes over a higher altitude than 6,000 feet and the gradients are relatively easy.

However as is true of any route passing through mountainous areas, there are numerous river crossings to be taken into account. What, in the dry weather, be a dry watercourse, in the wet weather becomes a raging torrent.

It is expected that 100 three-ton lorries will shortly be able to be sent each day from railhead to Kunming. Thus, an important link between the Bay of Bengal and China will have been effected.

It is understood that a survey has taken place with a view to building a railway from Lashio to Kunming in the near future, but there are several large bridges to be made which takes time to build.

On the Burma side, there are three lines of communications to Yunnan from the Bay of Bengal: (*a*) by rail from Rangoon to Lashio; (*b*) by rail to Katha and river to Bhamo and road to Muse; and (*c*) by river to Bhamo and road to Muse.

The two main bridges on the Chinese side over the Rivers Mekong and Salmin have been completed.

With directional wireless and good landing facilities at Kunming, there is no reason why civil aircraft could not fly day or night from Rangoon where Imperial Airways, and the Dutch liners, frequently call.

The Opium Problem

In view of all that has been said recently at Geneva and elsewhere about Japan and the traffic in narcotic drugs in the Orient, an examination of what has been done and of what is planned for the future on Manchoukuo may be of interest. Manchoukuo's opium policy and conditions have been made the target of numerous charges. The efforts made by the Manchoukuo authorities in reducing the traffic in, and the accompanying evils of, opium, with the object of their eventual elimination have been given little publicity or have been ignored by Western countries.

Among the outstanding reasons for this situation may be counted: (1) Because of geographical position, general conditions of Manchoukuo have been little known abroad; (2) Facts have been wilfully twisted or misrepresented; (3) The Manchoukuo Government has not been given sufficient time to carry out its policy in full, and (4) Manchoukuo is always looked upon with suspicion and prejudice.

Manchoukuo has just completed the first five-year experimental stage, true, with many short-comings but definitely with a bright outlook for the future. With five years' experience the Government, beginning in 1938, launched a new ten-year program in an effort to eradicate completely by the end of 1948 all opium smoking and narcotic uses, except for medicinal purposes.

Any one who wishes to understand the true conditions and the nature of the problems confronting the Manchoukuo Government must look at least hurriedly into the past.

Poppy cultivation and opium smoking are not new in this country. Opium smoking has long been a recognized evil in the social system of China where many excellently-worded laws prohibiting the evil have been enacted with little result due to maladministration and corruption, where due to venality of local authorities, opium trafficking was not only left unhampered but actually encouraged, enabling war-lords and others to amass vast fortunes. In many cases the farmers were not only encouraged but literally forced to cultivate poppy and the consequence of many decades of such practices was that poppy cultivation had become the sole means of livelihood for many peasants. Thus, by 1932 poppy cultivation, opium trafficking and smoking had become necessary evils in China proper, as well as in Manchuria. It is estimated that when the Manchoukuo Government tackled the opium question in 1932 there were no less than 1,000,000 addicts aside from those who smoked occasionally and others who smoked for medicinal purposes, consuming annually within Manchoukuo some 2,500,000 lbs. of raw opium.

The Manchoukuo Government is confronted with a gigantic task of fighting the cultivation, trafficking and smoking of opium. Poppy cultivation, opium smoking and trafficking are criminal offenses in Manchoukuo unless done with special permission from the Government, and through certain channels prescribed by the laws of the State. Late in 1932 the Government announced a definite workable plan to check and eventually rid Manchoukuo of the opium evil.

In attempting to control the situation, it is first of all necessary to curtail cultivation of the opium poppy and look after the addicts who must be given a certain amount of opium for the time being, and, secondly, to regulate strictly the distribution of the packed opium. The Manchoukuo Government learned from experiences elsewhere that complete restriction from the outset was not a solution to the problem and, consequently, launched upon a scheme which requires time but which no doubt will be far more effective in the end. In brief, the policy of the Government embodies the control of poppy cultivation and the strict prohibition of opium smoking by the general public, permitting smoking only by licensed addicts, gradually reducing the production of opium and the number of addicts, and finally removing the evil altogether.

System and Organization

As part of the general anti-opium program, the Government has established a General Monopoly Bureau in Hsinking, a policy forming body. Operating under it are the District Monopoly Bureaux in the following 14 cities: Hsinking, Mukden, Harbin, Kirin, Supingkai, Tsitsihar, Antung, Yingkow, Chinchow, Jehol City (Chengte), Chiamussu, Yenki, Mutanchiang and Shanchengchen, while under these there are 108 District Sub-Monopoly Bureaux.

The District and District Sub-Monopoly Bureaux were created with the following chief objects in view: first, to direct and supervise cultivation, trafficking and smoking of opium (the officials concerned having in connection with opium administration the powers equal to those of the police); secondly, to buy up the raw opium, the purchasing naturally being done by the Bureaux located in the Government allotted regions (from 1938 only those located in Jehol and West Hsingan Provinces will be engaged in purchasing) and send the same to the Government plant in Mukden where the dried opium is made into uniform packages with Government label on each and stored; thirdly, to distribute the said packed opium.

In the past the various Bureaux sold to licensed wholesale agents who in turn sold to licensed retail dealers (of whom there are about 1,900 at present). The packed opium was prepared and sold by retailers to some 700,000 licensed addicts. In the next several years all the private dealers in opium will disappear from the picture, for from 1938 the sale of opium to the addicts will be conducted gradually by the Government, by which system catering, competition, and, above all, sale to those without license will be completely eliminated.

Besides the above-mentioned Bureaux, there are agencies and offices established in the interior regions of the country to facilitate the purchase of the raw material, to supervise and direct the activities of the officials, to check illicit cultivation, refining and smoking of opium, as well as to prevent the clandestine distribution of the same. These last mentioned officials number little less than 500, who, working in co-operation with the police and the gendarmes, play an extremely important rôle in the successful execution of the Government policy.

In short, through the above-mentioned organs the Government purchased in the past raw opium from the licensed farmers at a price around 2.00 yuan per one liang (50 grams) and sold the packed opium to the licensed agents at about 4.00 to 4.50 yuan per one liang.

Henceforth with the effective working of the opium administration, successfully checking the illegal traffic, the Government will gradually reduce the purchasing price of the raw opium, which the Government hopes will discourage the cultivation of poppy and will offer appropriate substitute crops, and at the same time raise the selling price of the prepared opium so as to discourage smoking. With the introduction of these measures the drive against the drug evils will be conducted with both the economic and political weapons by which the Government hopes to obtain speedy and satisfactory results.

Area, Cultivation and Harvest

It is a crime for any one who does not possess a Government license to cultivate poppy in this country; cultivation being permitted only in certain designated areas to those who have been especially licensed by the Government.

When the Opium Monopoly Bureau was established in November, 1932, and followed subsequently by promulgation of various opium laws, some misunderstanding was created at first among the farmers who were led to believe that opium cultivation was legalized throughout the country. Consequently, in violation of the laws, poppy was cultivated in 1933 in many regions outside of those designated by the Government by those without license in spite of the fact that the Government scattered throughout the country bills, notices and posters announcing the Government policy, even by the use of several aeroplanes.

Although since 1933 the officially designated areas for cultivation have not shown drastic decrease, the total area of cultivation annually since 1932 within Manchoukuo, as compared with those prior to 1932, has decreased by at least 50 per cent as a result of the strict control exercised over illegal cultivation. Moreover, in 1938 the legalized cultivation will be limited only to West Hsingan and Jehol Provinces.

The legalized areas for cultivation of poppy since 1933 have been as follows :

	Area (hectares)			
1933	941,000			
		580,000	Jehol	Province
		361,000	Kirin	,,
1934	1,066,100			
		460,000	Jehol	Province
		40,000	West Hsingan	,,
		486,100	Kirin	,,
		80,000	Fengtien	,,
1935	690,000			
		310,000	Jehol	Province
		10,000	W. Hsingan	,,
		30,000	Chinchow	,,
		10,000	Antung	,,
		145,000	Chientao	,,
		50,000	Pinkiang	,,
		135,000	Sankiang	,,
1936	880,000			
		600,000	Jehol	Province
		50,000	W. Hsingan	,,
		200,000	Sankiang	,,
		30,000	Pinkiang	,,
1937	1,030,000			
		700,000	Jehol	Province
		50,000	W. Hsingan	,,
		250,000	Sankiang	,,
		30,000	Pinkiang	,,
1938	710,000			
		650,000	Jehol	Province
		60,000	W. Hsingan	,,

Note.—Approximately only ⅓ of total area of Jehol or W. Hsingan is arable.

Opium purchased and sold by the Government since 1933 :

(*Unit : liang = 50 gr.*)

	Quantity Purchased	*Value Yuan*	*Quantity Sold*	*Value Yuan*
1933.. ..	3,429,601	7,630,775	1,220,403	5,511,033
1934.. ..	6,612,951	14,999,670	3,808,499	14,372,726
1935.. ..	7,601,254	15,362,449	7,780,606	28,230,347
1936.. ..	10,307,943	19,834,664	10,108,223	38,667,556
1937.. ..	13,500,000	29,025,000	12,300,000	47,850,000

1937 figures = estimates.

The gradual increase in the amount of opium handled by the Monopoly Bureaux should not be misconstrued, for it is the result of the strict and proper Government administration, which is checking more and more all illicit traffic. Moreover, it should be noted that the estimated figure of 13½ million liang for 1937 does not yet equal the amount deemed necessary for the existing addicts in the country so that for several years to come we should still expect even further rise in the figures.

The monopoly resorts under the Department of Finance and Commerce are under the direct supervision of the Minister, for which reason the Manchoukuo Government is criticized that the monopoly was instituted in order to use opium as a source of national revenue. Here again the charges are groundless. This fact can be verified by a study of the figures relating to the income from opium.

There were, as may be seen by the above figures, large deficits in both 1933 and 1934 and it was not until 1935 that the revenue and the expenditures were barely balanced. It was, therefore, only in the last two years that the Government was able to obtain any profit at all from the opium monopoly. The profit for 1936 and 1937 have been appropriated for the suppression of bandits which go hand in hand with the illegal cultivation of poppy and also for the construction and improvement of hospitals and other establishments necessary for the care of drug addicts. All the profits from opium in the future will continue to be used for the medical care and attention for the addicts.

Addicts and License System

Although under the past system licensed retail dealers were permitted to sell only to adult licensed addicts, there were no effective means to stop one license holder from buying from a series of dealers and redistributing his purchased amount to smokers without license or to check the use of one license by several people. Because of this obvious defect, the Government introduced from January, 1938, a license system similar to that used in Formosa with slight modification.

Under the new system (to be used in relation to narcotic addicts as well) each proved addict will be provided with a pass book which will consist of series of tickets with the date and the day's ration designated on it. The ticket can only be used on the designated date to purchase the stipulated amount and with each sale the dealer removes the ticket with the date corresponding to the day of the sale. Since the sellers will be from 1938 the Municipal, Provincial and District Government officials it is believed to be even an improvement over the systems used in Formosa.

To-day there are roughly 700,000 addicts licensed by the Government. This number is expected to reach about 1,000,000 when all those smoking without license are counted. The increase in the number of licensed smoker's (thus eliminating all illegal smoking) is the natural consequence of the efficient enforcement of the opium law and the carrying out of the policy of eventual eradication of the opium evils.

At present the means to give special care and attention to the advanced addicts are still inadequate, although there are already some ten infirmaries established for the purpose. The Government is planning to increase, as well as to better equip, such institutions in time. The clinics giving free medical treatments are located in Hsinking, Mukden, Kirin, Harbin, Tsitsihar, Chengte (Jehol City), Shanhaikuan, Manchuli, Antung and Yingkow. There is a definite plan under way, supervised by the Department of People's Welfare, for the construction of some 25 new hospitals within the coming several years to be financed by the incomes from the opium monopoly.

The Ten-year Plan

With the close of the experimental stage of the first five years, banditry has almost completely been suppressed, cultivation of the poppy and illicit traffic in opium put well under control for the first time. In 1936, 70 per cent of the addicts registered and, finally in July, 1937, the Narcotics Law was promulgated, thus paving the way for the final removal of the opium evils.

One of the latent defects of the monopoly system during the experimental stage was that the monopoly applied only to raw opium, but in August of this year morphine and heroin were also put under Government monopoly, while the manufacture, trafficking and use of other dangerous drugs are strictly prohibited to the general public, except by those with special permits issued by the Minister of the Department of People's Welfare.

According to the revised policy, manufacture, transportation and sale of narcotics will generally be conducted directly by Government officials, except in such cases where those especially designated by the competent Minister are allowed.

Narcotics will be sold to licensed addicts through the Municipal, District and Provincial Governments. Like opium addicts, narcotic addicts will be given a pass book with a series of tickets on which will be designated the date and the day's ration, so that one pass book cannot be used several times in one day or by different persons.

The Ten Year Plan, ending in 1948, announced recently by the Government does not differ radically in principle from that announced in late 1932 except that a time limit has been fixed in which time all possible efforts will be exerted for the realization of the final eradication of the drug evils.

The Ten Year Plan may be briefly outlined as follows :

(*a*) ANTI-OPIUM MOVEMENT.—(1) Efforts will be made through schools and social education, as well as other agents, to create and spread the anti-opium smoking idea and to foster a national abstinence movement.

(*b*) PREVENTION OF NEW ADDICTS.—(2) In order to prevent the appearance of new addicts, the license system will be strictly enforced and from 1938 no new license will be issued to any one below 25 years of age. Moreover, from the end of 1939 no license whatever will be issued to any one who is not registered as an addict.

(3) No addicts will be permitted to enter this country.

(*c*) TREATMENT OF ADDICTS.—(4) When a license is renewed or extended, new conditions will be added.

(Continued on page 27)

Japan's Canning Industry

The progress of the canning industry has been very closely linked with warfare. Its very invention had some connection with the crushing defeat of Napoleon the First at Moscow, when he ruefully realized that "an army travels on its belly." There are indeed many examples of war having been an incentive to the expansion of the canning industry of Europe and America. The development of the canning industry of the United States had its origin in the Civil War. It is a well known fact that the United States shipped 200,000,000 cases of canned goods to the battle area during the Great European War. Ex-President Herbert Hoover stated that the allies' ultimate victory in the European War was due rather to the abundant foodstuffs sent by the United States to the front, than because of the American participation in the war on the side of the allied forces.

The fact that the canning industry has experienced an expansion in these past wars is attributable to several important features of canned goods. Of all forms of foodstuffs, canned food can be preserved the longest. Above all it is safe from all contamination. Readily handled and convenient for transportation, it suffers no change even if exposed to rains or immersed in water for a considerable time. No further preparation or flavoring is required, for it is not merely edible but palatable just as it is. In point of these characteristic merits, no other foodstuffs can stand comparison with canned provisions.

The historical development of the canning industry of Japan has been similar to that of Europe and America. Within the period of about seventy years which has elapsed since it was started by the late Mr. Masanori Matsuda under the instruction of a Frenchman, Jullie by name, at Nagasaki, in 1869, the industry has witnessed a remarkable growth; particularly rapid expansion being registered during the Sino-Japanese, the Russo-Japanese and the Great European Wars. The annual output of canned food in Japan which was 200,000 cases at the time of the Sino-Japanese War, increased to 800,000 cases with the Russo-Japanese hostilities; to 1,350,000 cases in 1918; and to 3,700,000 cases in 1926. Production has increased at an accelerating pace since then, especially after the year 1931, when the increasing tendency was further spurred by the reimposition of the gold export embargo, the figure finally rising to the record of 13,158,988 cases in 1937. Along with the increased production, exports of canned goods which were a mere 27,000 odd cases in 1905, reached 6,700,000 cases in 1937, a 250 fold increase within 18 years.

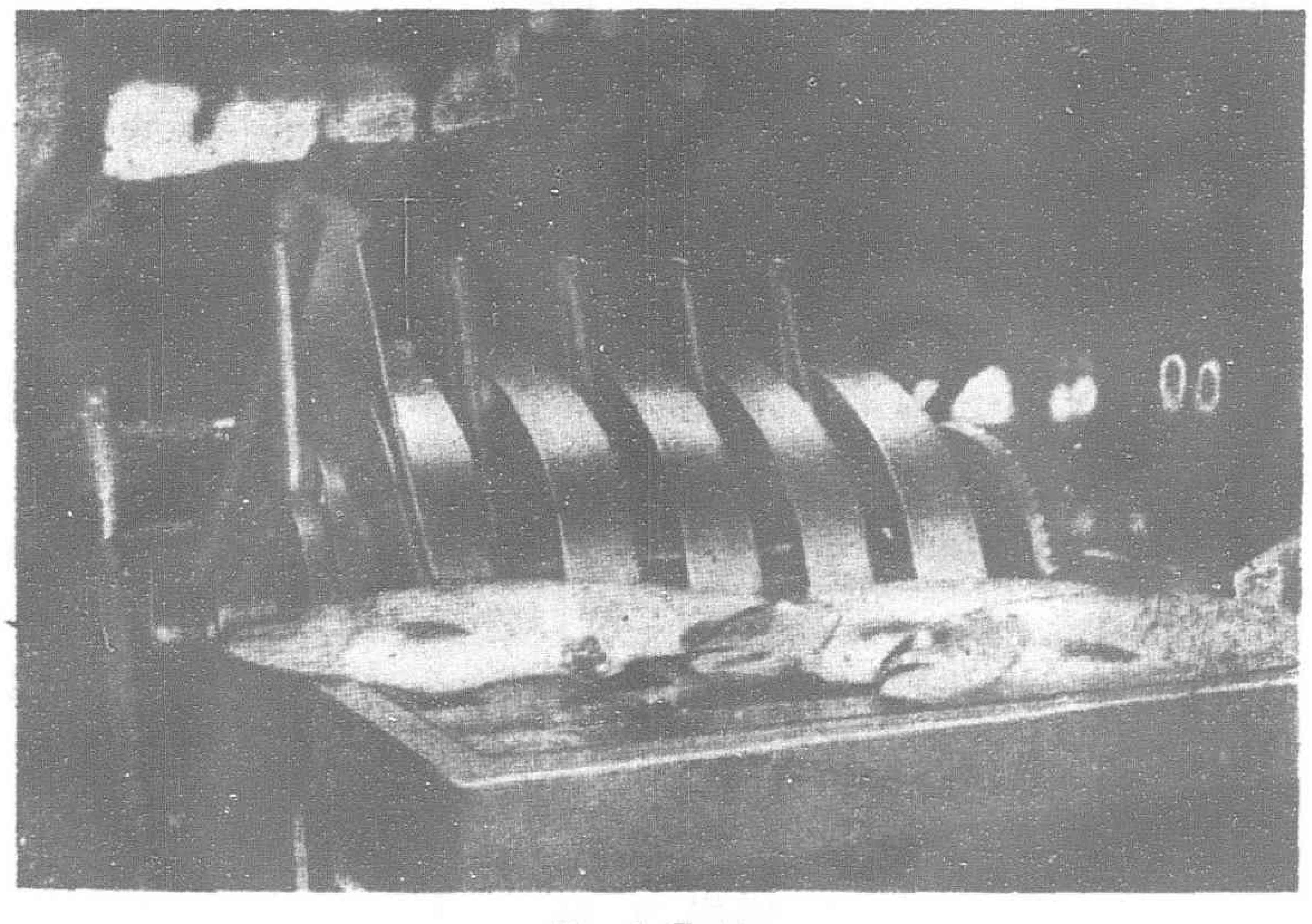
ANNUAL PRODUCTION OF VARIOUS CANNED FOODS IN JAPAN

Year	*Meat and Dairy Products*		*Marine Products*		*Vegetables*		*Fruits*		*Total*
	Quantity (in cases)	*Percentage to total*	*Quantity (in cases)*	*Percentage to total*	*Quantity (in cases)*	*Percentage to total*	*Quantity (in cases)*	*Percentage to total*	
1930	776,742	15.7	2,779,266	56.3	829,640	16.8	551,794	11.2	4,937,443
1931	673,289	15.8	2,137,111	50.1	491,914	11.5	966,503	22.6	4,268,817
1932	817,885	15.6	2,664,401	50.9	651,505	12.4	1,102,348	21.1	5,236,139
1933	891,640	14.1	3,389,087	53.8	552,372	8.8	1,467,615	23.3	6,300,714
1934	1,038,229	13.3	4,297,113	54.9	756,748	9.7	1,733,653	22.1	7,825,843
1935	1,136,349	13.1	4,921,868	56.8	772,813	8.9	1,841,166	22.2	8,672,196
1936	1,064,613	10.4	5,486,160	53.8	1,129,996	11.2	2,511,784	24.6	10,192,553
1937	1,246,401	9.5	7,735,009	58.8	1,298,168	9.8	2,879,401	21.9	13,158,988

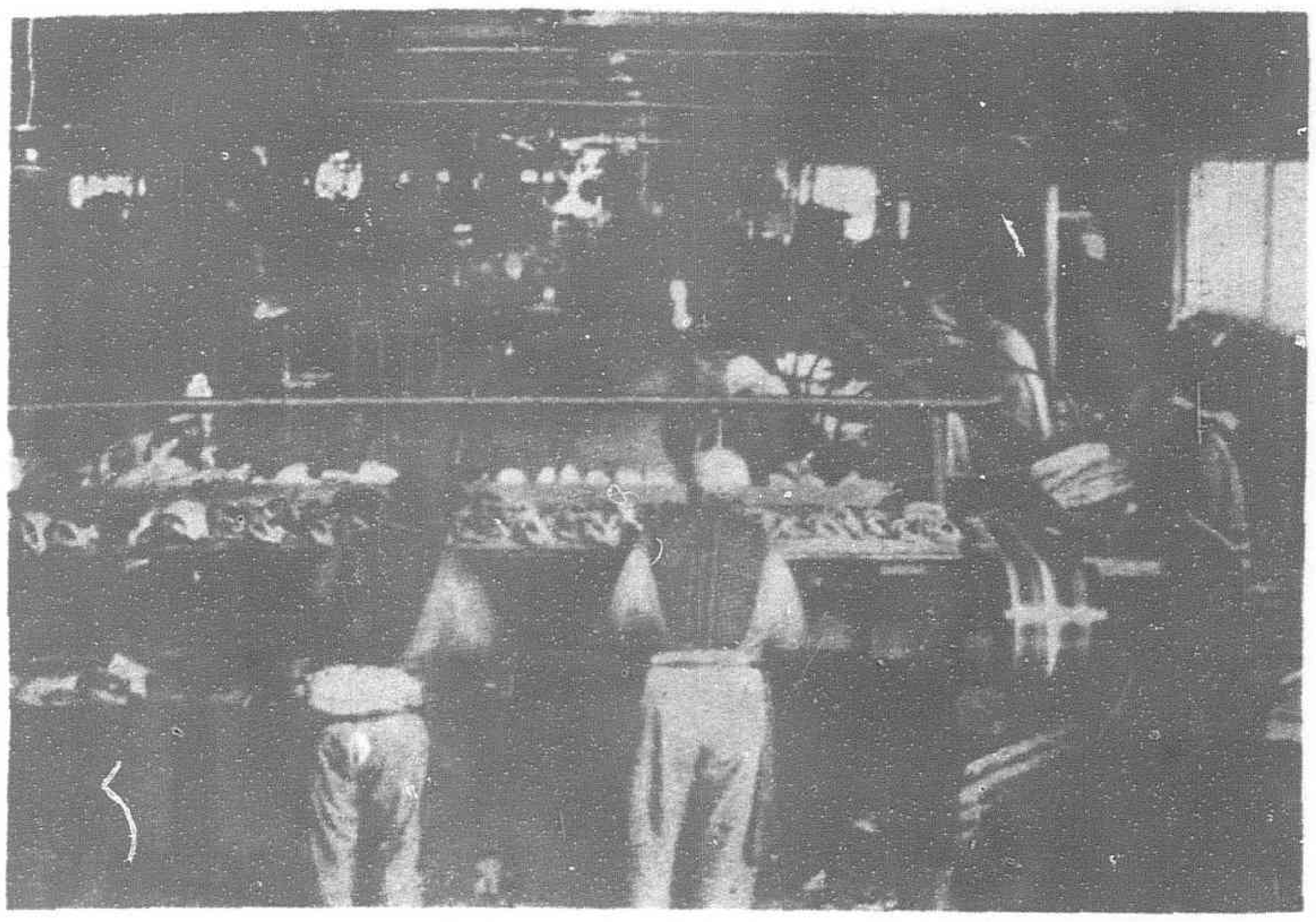
ANNUAL EXPORTS OF VARIOUS CANNED FOODS FROM JAPAN

Year	*Meat and Dairy Products*		*Marine Products*		*Vegetables*		*Fruits*		*Total*
	Quantity (in cases)	*Percentage to total*	*Quantity (in cases)*	*Percentage to total*	*Quantity (in cases)*	*Percentage to total*	*Quantity (in cases)*	*Percentage to total*	
1930	19,248	1.1	1,657,342	94.2	45,338	2.6	37,318	2.1	1,759,246
1931	49,457	3.4	1,307,097	60.3	38,906	2.7	51,822	3.6	1,447,282
1932	55,903	2.6	1,939,301	90.7	62,103	2.9	81,450	3.8	2,138,757
1933	69,709	2.2	2,821,076	87.9	79,736	2.5	238,571	7.4	3,209,092
1934	143,692	4.0	2,914,901	81.8	95,179	2.7	408,064	11.5	3,561,806
1935	224,749	5.8	3,158,915	81.2	133,676	3.4	375,139	9.6	3,892,479
1936	179,069	3.4	3,949,725	74.4	136,639	2.6	1,044,482	19.6	5,309,915
1937	115,811	1.7	5,103,998	76.0	214,137	3.2	1,281,770	19.1	6,715,716

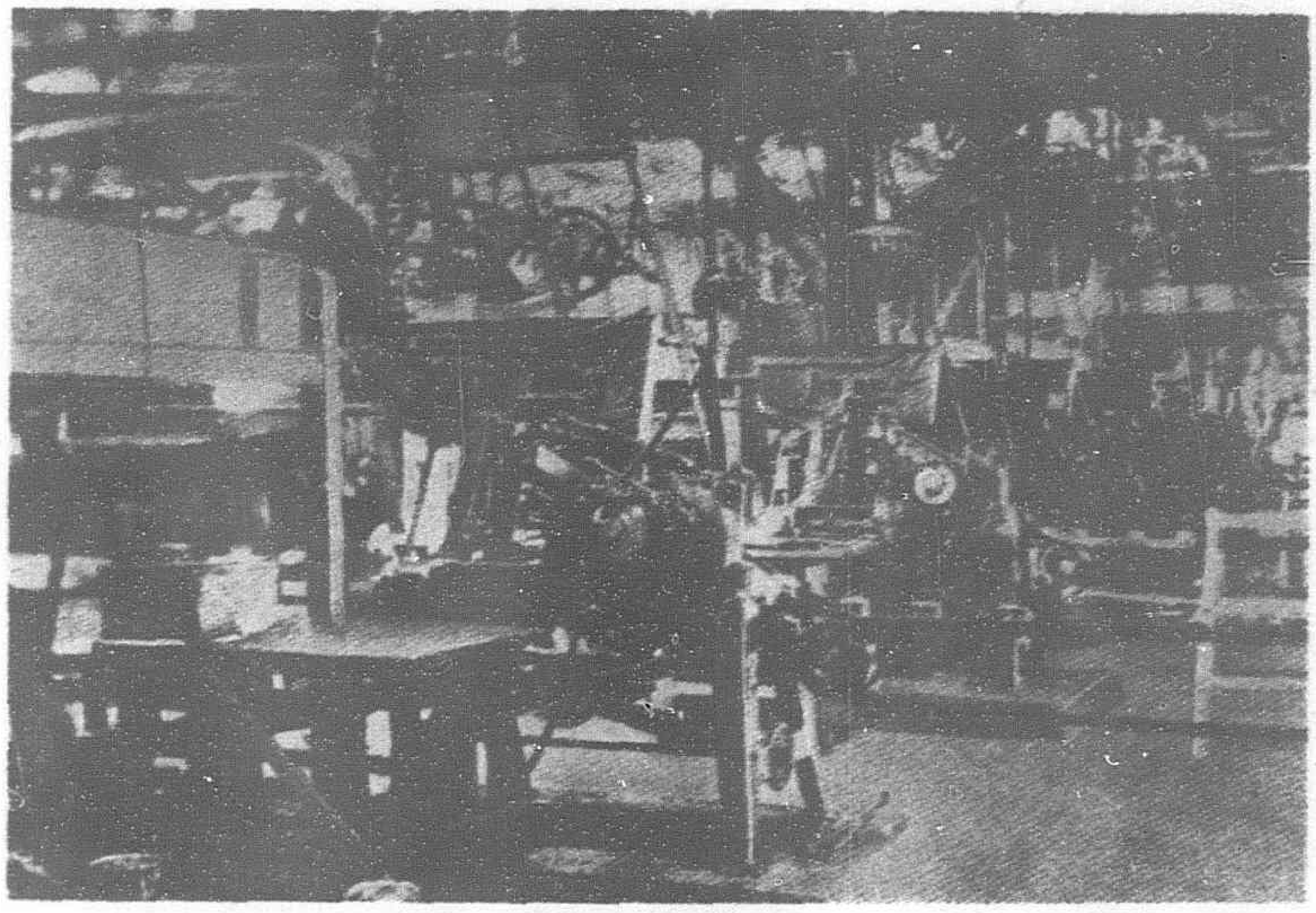
Sorting stage and fish conveyor



Head Cutter



Salmon washing room



Filling machines

Compared with other principal export commodities, the position of canned and bottled comestibles shows up very favorably. Whereas the ratios of cotton textiles, raw silk, rayon textiles, silk textiles, hosiery products, earthen and porcelain wares and toys to the total exports betray an inclination to decline or to remain static, canned and bottled comestibles, in common with " machinery and parts," cotton yarns, iron manufactures and woollens are steadily on the upgrade. Prevailing circumstances however do not permit us to entertain much hope of further relative expansion in the categories of iron manufactures, cotton yarns and woollens in the future, especially in view of a restricted supply of their raw materials. Expansion may thus be anticipated only in canned goods and " machinery and parts." In regard to the former, it is noteworthy that shipments abroad have been able to maintain an annual increase rate of approximately 20 per cent.

COMPARATIVE FIGURES FOR PRINCIPAL EXPORTS COMMODITIES

(Unit of value : Y.1,000)

Articles	*1935* *Value*	*1935* *Ratio to the total exports* (%)	*1936* *Value*	*1936* *Ratio to the total exports* (%)	*1937* *Value*	*1937* *Ratio to the total exports* (%)
Cotton	496,097	19.5	483,591	18.0	573,065	18.0
Raw silk	387,032	15.5	392,809	14.6	407,118	12.8
Rayon textiles	128,260	5.1	149,170	5.5	154,860	4.9
Canned and bottled comestibles	69,122	2.8	82,910	3.1	100,395	3.2
Machinery and part ..	63,856	2.6	82,054	3.0	109,881	3.5
	77,444	3.1	68,027	2.5	72,286	2.3
Hosieries	50,266	2.0	49,988	1.9	60,712	1.9
Cotton yarns	35,873	1.4	38,345	1.4	54,906	1.7
Iron manufactures ..	37,504	1.5	40,302	1.5	54,116	1.7
Earthen and porcelain wares	42,735	1.7	43,548	1.6	53,548	1.7
Woollen goods	32,401	1.3	45,956	1.7	50,956	1.6
Toys	33,852	1.3	36,459	1.4	42,295	1.3
Total with others ..	2,497,075	100.0	2,692,976	100.0	3,175,418	100.0

Note :—Figures for canned and bottled comestibles include those covering products in Soviet territory.

The production of canned goods in Japan aggregated more than 13,000,000 cases in 1937, as against a total of 4,900,000 cases for 1930. Taking the 1930 figures as the base, therefore, Japan's annual production of canned goods has witnessed a 2.6 fold expansion within eight years. The present plans of the canners, call for a further increase in the current year to 15,000,000 cases.

The quantity of canned goods exports, which was little over 1,750,000 cases in 1930, reached 6,710,000 cases in 1937, a remarkable expansion of 381 per cent. The canners' plans under way seek to increase the turnover to 7,500,000 cases for 1938. The canned food industries have thus expanded with amazing rapidity due especially to their growing acceptance abroad.

In point of production, Japan to-day can actually claim second rank among the countries of the world. To be sure the United States' production of 278,000,000 cases in 1936, constituting 78 per cent of the world total, sets her on a pedestal apart, whereas Japan's ratio in the same year was a mere 2.6 per cent (This corresponds to 3.67 per cent of the American output). In the field of canned aquatic products, however, Japan's second place ranks higher. With an annual production of more than 5,400,000 cases, as against 19,000,000 cases in the United States, Japan's ratio compared to the former in this case, stands at a little more than 28 per cent. The relative importance and outstanding performance found in the sea-foods department is naturally due to Japan's geographical position surrounded by seas, rich in marine life, with its long coast lines extending over the frigid, temperate and tropical zones. It is only natural that in compensation for its narrow limitations of land space for utilization, its fisheries have been highly developed and that the processing of aquatic products has received such intensive attention.

Japan's canning industry also occupies a fairly important position in international trade ; exports accounting for about 13 per cent of the total canned goods placed annually on the world markets which are estimated at approximately 50,000,000 cases.

JAPAN'S PRODUCTION AND EXPORTATION OF VARIOUS CANNED FOODS

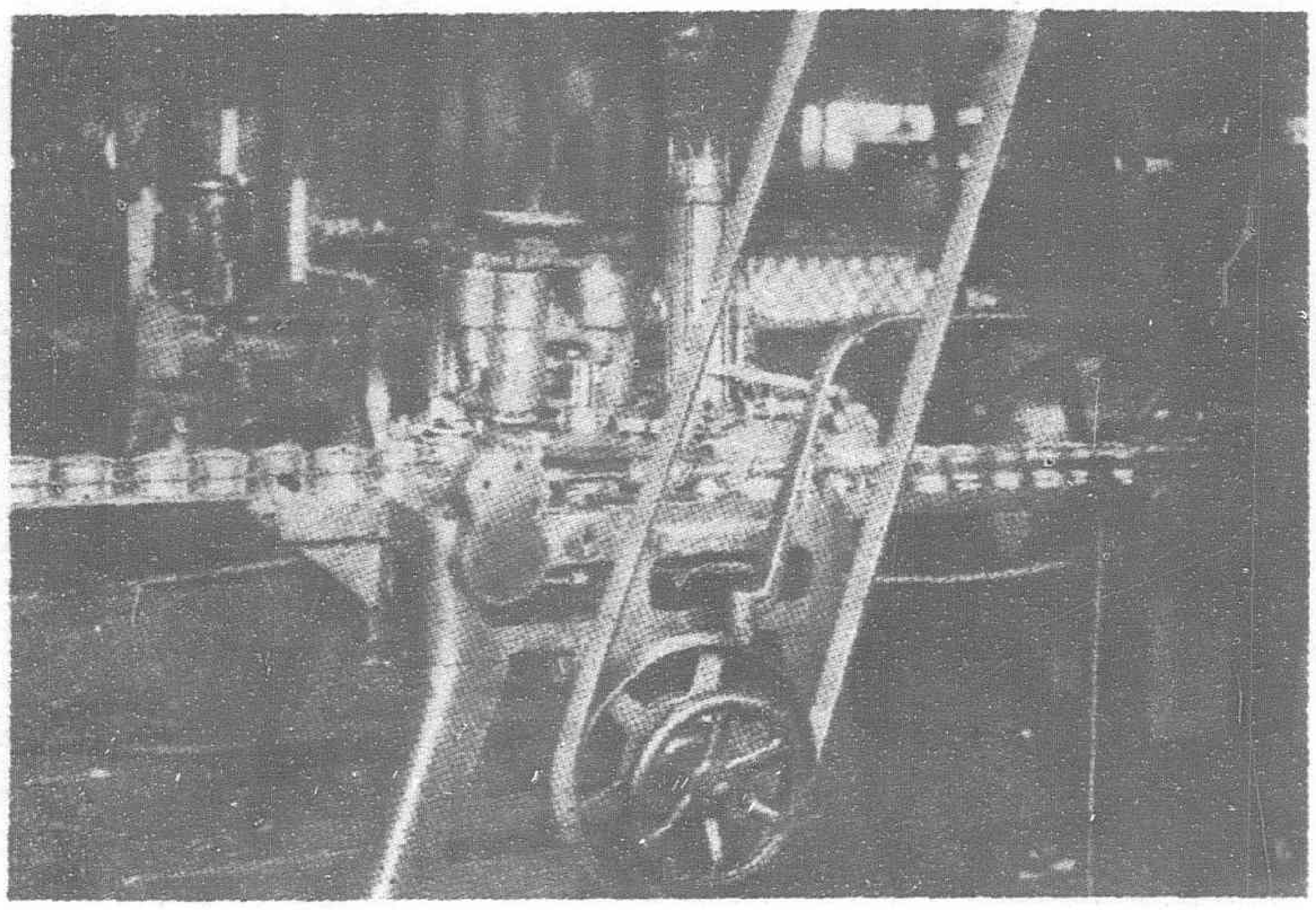
Year	*Production* *Quantity (in cases)*	*Production* *Percentage gain or decrease (—) in comparison with preceding year* (%)	*Production* *Index number (1930=100)*	*Exports* *Quantity (in cases)*	*Exports* *Percentage gain or decrease (—) in comparison with preceding year* (%)	*Exports* *Index number (1930=100)*	*Ratio of exports to production %*
1930	4,937,443	—	100.0	1,759,246	—	100.0	35.6
1931	4,268,827	*15.7	86.5	1,447,282	*21.6	82.3	33.9
1932	5,206,109	22.0	105.4	2,138,757	47.8	121.6	41.1
1933	6,370,714	22.4	129.0	3,209,092	50.0	182.4	50.4
1934	7,825,843	22.8	158.5	3,561,806	11.0	202.5	45.5
1935	8,672,196	10.8	175.6	3,892,479	9.3	221.3	44.9
1936	10,192,523	17.5	206.4	5,309,915	36.4	301.8	52.1
1937	13,158,988	*29.1	266.5	6,715,716	*26.5	381.7	51.0

*Decrease

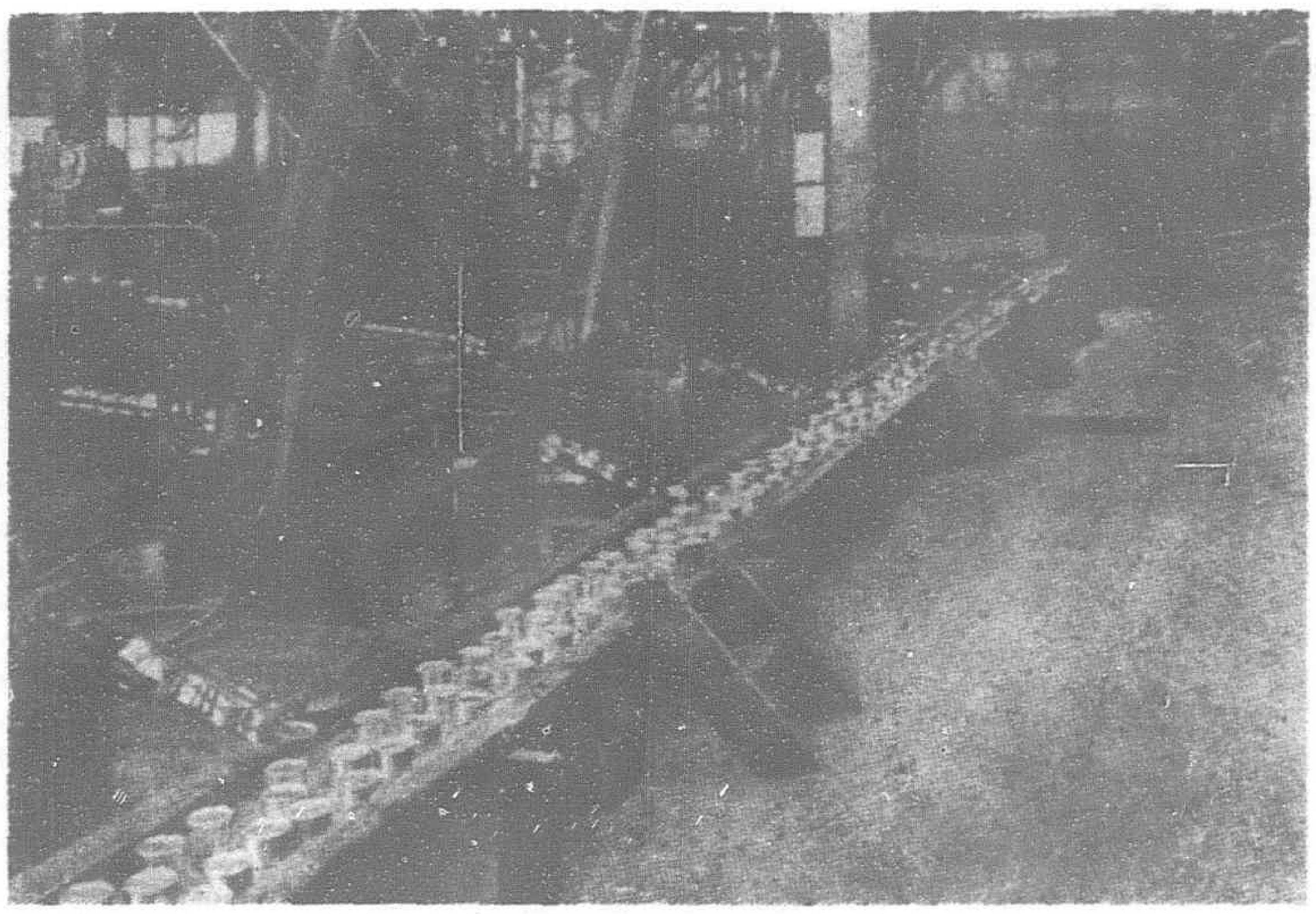
Approximately 200 kinds of canned goods are produced in Japan at present. Those varieties whose annual production exceed 100,000 cases are salmon, sardines, tuna and bonito, mackerel, crab, condensed milk, pineapple, oranges, bamboo-shoots and peas. The annual production of these ten commodities has made up 83.8 per cent of the total of all canned goods, on the average, for the past three years. It is, therefore, clear that fluctuations in these ten classes have a considerable influence over the development of the local canning industry. In the following paragraphs, an attempt will be made to deal in some detail with these principal ten canned goods leaders.

Canned Salmon

Among all branches of Japanese canning industry, salmon canning has the oldest history, having been started as early as 1878, for export ; but due to a shortage of red salmon (a species favored on the British and American markets chiefly), canned salmon domestically packed was practically confined to military and local demand down to the close of the Meiji Era (1911). As the result of



Cover clinchers



Canned salmon coming off cover seamer belt conveyor to retorts

the Russo-Japanese War, however, fishery rights in Kamchatka were confirmed under the Portsmouth Treaty, and thereafter the salmon canning industry was assured of an abundant supply of red salmon. This branch of canning thus made a gradual expansion before the World War, which greatly stimulated it ; and subsequently, especially following the termination of the European War, Japanese canned salmon has built up a solid position on its merits as a high-quality product in the British markets.

Meanwhile, aggressive advertising campaigns have been conducted for the augmentation of domestic consumption of the cheaper grades, as the development of the off-coast salmon fishing in the neighborhood of the North Kurile Islands has tended to increase the production, while latterly, centralized control of the Kamchatka and the northern sea-fisheries have insured the safety of supply and stability of the salmon canning industry. In the export field, a system for regulating shipments was rendered necessary by the quota regulations of France and was first set up in 1933. At present, the entire export business is channeled through two organizations set up by the packers for the purpose viz., the Keison Kyohan Kai (The Pink Salmon Joint Sales Association) and the Benisake Kyoei Kai (The Red Salmon Canners Mutual Welfare Association). The production of canned salmon saw an increase of 158 per cent in 1937, compared with 1930, the export business likewise showing a gain of 158 per cent.

CANNED SALMON PRODUCTION AND EXPORTS

Year	*Production*			*Exports*			
	Quantity (in cases)	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Quantity (in cases)*	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Ratio of exports to production %*
1930	1,593,300	—	100.0	1,314,942	—	100.0	82.5
1931	1,161,116	*27.9	72.9	910,798	*30.0	69.3	78.4
1932	1,413,844	21.8	88.7	1,167,128	28.1	88.8	82.5
1933	1,446,405	2.3	90.8	1,344,822	15.2	102.3	93.0
1934	2,290,196	58.3	143.7	1,574,482	17.1	119.7	68.7
1935	2,382,521	4.0	149.5	1,386,832	*11.9	105.5	58.2
1936	2,400,127	0.7	150.6	1,840,950	32.7	140.0	76.7
1937	2,524,404	5.2	158.4	2,083,267	13.2	158.4	82.5

*Decrease

Canned Crab

Records show that canned crab was manufactured in Japan as early as 1893. Its production for export was started in 1907, when canned crab packed by Mr. Katsuzo Izumi of Nemuro, Hokkaido, was shipped by Mr. Takanoshin Domoto to the United States. This was followed by the successive establishment of crab canneries in Nemuro Province and Karafuto in 1909 and 1910, resulting in an annual increase in the output of canned crab. In Hokkaido, a license system was set up by the Government for the crab canning enterprises in 1911, but the industry was left free in Karafuto. The consequence of unlimited uncontrolled production was, as usual, common ruin—involving practically all the crab canners, out of which unhappy state finally emerged a large-scale consolidation of the enterprises in the same line.

About this time, Mr. Teisuke Wajima originated the floating cannery idea with a sailing ship. This was followed by the enterprise of Mr. Sanemichi Yagi, who first operated a floating cannery with his steamer *Karafuto Maru* in 1921 obtaining favorable results. This gave rise to the floating canneries for crab, until the number of canneries located on ship-board reached more than 18.

As the result of painful experiences of the same order as above a great merger of the enterprises took place under the spur of necessity. After many twists and turns all the floating canneries are now under the control of the Nippon Fishery Company, Limited, operating about eight floating canneries. To-day, the floating cannery enterprises are subject to a license system, their production is strictly limited to give the much " chivvied " crustacean a sporting chance for survival. Similar regulation applied to the land canneries in Hokkaido and also Karafuto has been evolved, and the production of canned crab has thus become fairly stable in recent years.

The crab canning industry took the initiative in adopting a sales-centralizing scheme. It was prior to the re-imposition of the gold export embargo in this country that the packers, after many vicissitudes decided on the plan under which, the export prices of canned crab are quoted in all circumstances on the basis of c.i.f. port of destination and in terms of the currency of the buyer countries. This system has been operating favorably, since it tends to stabilize prices on the consuming markets and relieves the exporters from the risks of exchange fluctuation.

CANNED CRAB PRODUCTION AND EXPORTS

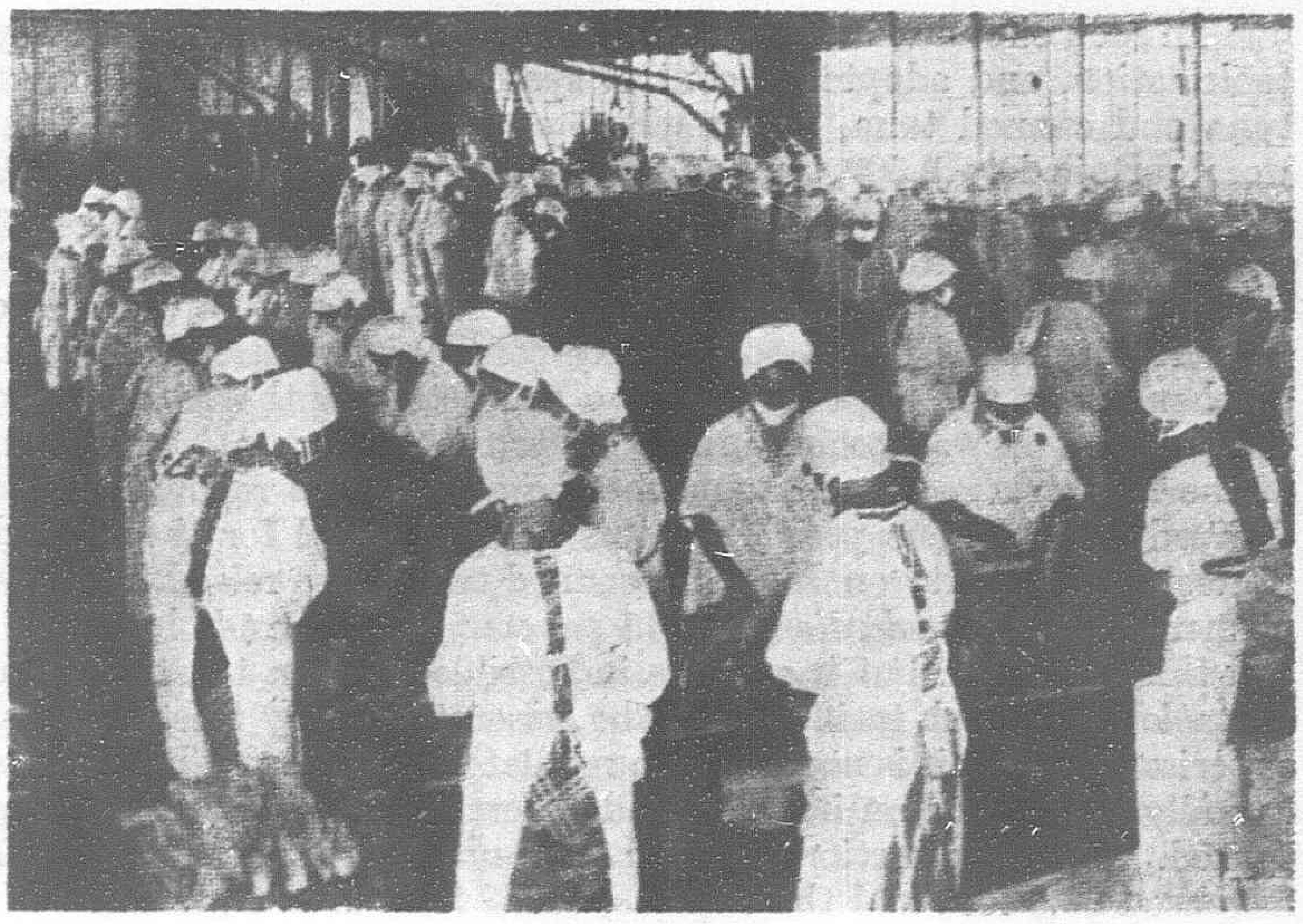
Year	*Production*			*Exports*			
	Quantity (in cases)	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Quantity (in cases)*	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Ratio of exports to production %*
1930	574,932	—	100.0	364,446	—	100.0	63.4
1931	439,245	*23.6	76.4	334,077	*8.3	91.7	76.1
1932	304,295	*30.7	52.9	311,057	6.9	85.4	102.2
1933	324,596	6.7	56.5	409,019	31.5	112.2	126.0
1934	417,083	28.5	72.5	313,971	*23.2	86.1	75.3
1935	423,882	1.6	73.7	396,768	26.4	108.9	93.6
1936	341,060	*19.5	59.3	325,826	*17.9	89.4	95.5
1937	437,553	28.3	76.1	363,036	11.4	99.6	83.0

*Decrease

Canned Sardines

Sardines are canned chiefly in tomato-sauce. Packing of large-size sardine in tomato in oval cans was originated by Mr. On Kajikawa, one of Japan's pioneer canners. It is recorded that he sent samples of his canned sardine in tomato to San Francisco, California, asking for the opinion of those engaged in the canned food trade in that city even before this fast selling article was produced in the U.S.A. However, it was towards the end of the Taisho Era (1925) that canned sardine in tomato was produced on a commercial basis in Japan, when the United States had already established an extensive market in South Sea countries for more than a million cases of its canned sardine in tomato.

Battery of retorts for pressure cooking



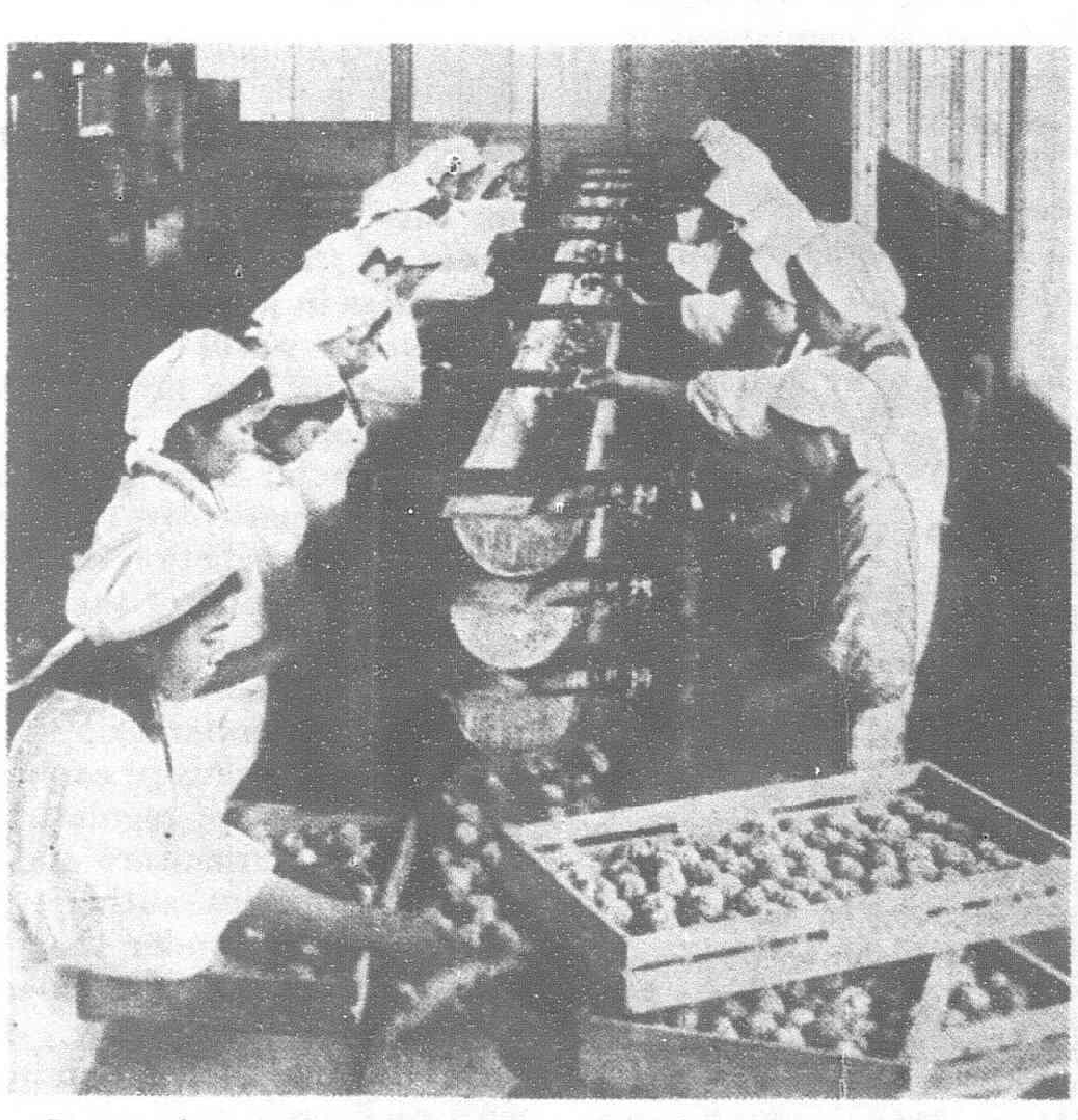
Trimming tuna

The first experimental pack was at the Fishery Experimental Station of Nagasaki, Kyushu. Then the Nagasaki Food Factory was established (later transformed into Naigai Food Company, Ltd.). Strenuous efforts were made by those concerned, but it was impossible at that time to export more than about 36,000 cases. Incidentally, however, France effected a sweeping change in its Import Tariff in 1930. A high import duty of 300 franc per 100 kilograms was imposed on canned sardines from the United States, which had hitherto shipped annually some 400,000 cases, whereas the low rate of only 75 franc ruled on the Japanese product. This tariff arrangement naturally greatly benefited Japanese exports of canned sardine in tomato, which found that their way to France was suddenly "smooth sailing."

In 1933, the French Government introduced severe import trade restrictions, and in this connection the trade of canned sardines in tomato had to be sacrificed to the interests of canned salmon. However, there has been a rapid growth in business with South Sea countries, thanks to the helpful effects on prices (in foreign currencies) of the re-imposition of the gold export embargo. The shipments of canned sardines in tomato have made particularly sharp gains since 1936, when a production control was put in force.

In the latter half of 1937, the business was affected severely by the boycott movements inaugurated by Chinese merchants in these markets after the outbreak of the China incident, but it appears that the worst has now passed. It may also be mentioned that, after the adoption of the control system on tomato sardines, pepper sardine and oil sardine, both of which are not yet under control, have witnessed a considerable expansion, but it is thought that they, too, will have to be placed gradually under regulation in the interests of survival. Taking the production of 1930 as the base, the 1937 output of canned sardine represented an increase of 15.56 fold and exports for the same year 44.77 fold increase.

In point of the volume of catches, sardines take the predominant position among all the fishery products, the annual catches aggregating about 1,845,000 tons. It is found successively, along every part of the coasts extending from Karafuto and Hokkaido in the north to Kyushu and Chosen in the south. The raw material used for 1,000,000 cases of canned sardine is only two per cent of the total catch. On the other hand, canned sardines find consumers in practically every part of the world, enjoying because of its cheapness a wider market in the world than canned salmon. In view of these factors, the canned sardine industry can be easily expanded, if the required effort be made.



Separating orange segments, washing tank and water conveyor

Production and Exports of Canned Sardine

(In Tomato, Oil and Boiled Plain)

	Production			*Exports*			
Year	*Quantity (in cases)*	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Quantity (in cases)*	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Ratio of exports to production %*
1930	110,000	—	100.0	36,236	—	100.0	32.9
1931	115,000	4.5	104.5	39,920	10.2	110.0	34.7
1932	332,259	188.8	302.1	188,816	373.0	521.0	56.8
1933	499,115	50.2	453.7	306,682	62.4	846.3	61.4
1934	768,386	53.9	698.5	527,864	72.1	1,456.7	68.7
1935	1,038,140	35.1	943.7	711,740	34.8	1,964.2	68.6
1936	1,547,289	49.0	1,406.6	1,134,760	59.4	3,131.5	73.7
1937	1,712,482	10.7	1,556.8	1,622,350	43.0	4,477.1	94.7

Canned Tuna and Bonito

Canned tuna and bonito produced in Japan is principally packed in oil. Canned tuna made of "binnaga" tuna (Albacore) is known as "white meat" and that which is made of other varieties of tuna and bonito, is called "light meat." There is no distinction between tuna and bonito once canned. Canned tuna is a comparatively new product. It was manufactured experimentally back in the Meiji Era, but it was only after 1930 that this line was put on an industrial scale in Japan. Thereafter, it has made favorable progress, and there have appeared many tuna canners in succession since 1932.

In 1933, exports of canned tuna from Japan to the United States reached an amount nearly three times as large as the record of the immediately preceding year, a too sudden rise that caused a trade dispute with that country which finally resulted in a higher import duty. Japan also exports tuna in cold storage to the United States. Naturally, there arose friction between the interests of the canners and the shippers of cold storage tuna. Thereupon, representatives of the two groups were sent to the United States for negotiations with the American interests, but they failed to conclude any amicable agreement. The friction become intensified later, and it was feared that the American Government might even consider drastic measures in protection of the domestic industry, should the situation be left to take its own course.

In such circumstances, the Ministry of Agriculture and Forestry took action, and adopted a control system over both cold storage tuna and canned tuna, under which exports of cold storage tuna were curtailed to 3,500 tons and those of canned tuna, to 300,000 cases, in 1934. At the same time, the production of canned tuna was placed under a license system, and thus production quotas and sales control have been made inevitable. As early as 1932, the canners attempted to get together to control production, but such a scheme was not approved by the competent authorities on the ground that it was premature to limit the "natural" expansion of the industry. As a consequence the adoption of regulation was delayed for only one year; but this delay sufficed for the United States's import duty on Japanese canned tuna to be raised from the former 30 per cent *ad valorem* to 45 per cent! The trade has survived this handicap, but it appears impossible, forever, to remove the obstacle of the high tariff rate! The lesson taught by this unhappy experience is that it is necessary to regulate any industry before it is actually faced with an impasse and before irremediable damage is caused. The production of canned tuna and mackerel in 1937 increased 60.9 fold and the exports, 81.25 fold, in comparison with 1930.

PRODUCTION AND EXPORTS OF CANNED TUNA

(Including Canned Mackerel)

Year	*Production*			*Exports*			
	Quantity (in cases)	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Quantity (in cases)*	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Ratio of exports to production %*
1930	14,029	—	100.0	9,612	—	100.0	68.5
1931	28,307	101.8	201.8	27,801	189.2	289.2	98.2
1932	264,799	835.4	1,887.5	255,626	819.5	2,347.3	96.5
1933	705,488	166.4	5,028.8	680,283	166.1	7,077.4	96.4
1934	276,195	*60.9	1,968.7	284,217	*58.2	2,956.8	102.9
1935	631,276	128.6	4,999.8	378,199	33.1	3,934.6	59.9
1936	720,078	14.1	5,132.8	374,932	* 0.9	3,900.6	52.1
1937	854,801	18.7	6,093.1	781,053	108.3	8,125.8	91.4

*Decrease

Canned Condensed Milk

The first condensed milk was produced in Japan in or about 1890, by the late Dr. Shichizo Nagai (then the chief engineer of the Dai Nippon Pharmaceutical Company) at a plant of the company in Kobikicho, Tokyo. The product was marketed under the "P" brand. If the writer's memory is correct, this first condensed milk was followed by "Kacho" brand of Mr. Chojiro Fujii and "Soldier" brand of the Kairikusha. However, all of these products were rather crude imitations of the American eagle brand condensed milk. They were under labels very similar in design to the eagle brand, and occasioned a case involving the infringement of trade-marks. Later, the quality of Japanese condensed milk was greatly improved and has become comparable favorably with foreign products, due to the combined effect of the Government's encouragement of the diary industry, the rebating of the sugar tax, higher import duties, and other protective measures, as well as unflagging efforts on the part of the producers. Condensed milk has been used principally as a food for infants in Japan and therefore, the promotion of this particular industry was aimed to meet domestic requirements rather than for the development of export business. This objective has been almost accomplished. The producers are now in a position to seek outlets for their increasing production.

PRODUCTION AND EXPORTS OF CANNED MEAT AND DAIRY PRODUCTS

Year	*Production*			*Exports*			
	Quantity (in cases)	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Quantity (in cases)*	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Ratio of exports to production %*
1930	776,743	—	100.0	19,248	—	100.0	2.5
1931	673,289	*15.4	86.7	59,457	156.9	256.9	7.3
1932	817,885	21.5	105.3	55.903	13.0	290.4	6.8
1933	891,640	9.0	114.8	69,703	24.7	362.2	7.8
1934	1,038,229	16.4	133.7	143,692	106.1	746.5	13.8
1935	1,136,349	9.5	146.3	224,749	56.4	1,167.6	19.8
1936	1,064,613	*6.7	137.1	179,069	*25.5	930.3	16.8
1937	1,246,401	17.1	160.5	115,811	*54.6	601.7	9.3

*Decrease

Canned Pineapple

Although pineapple canning was started in Taiwan in 1904, the progress of the industry was very slow. Its annual production was only about 100,000 cases for a long period. Subsequently, it has developed vigorously under the leadership of the Taiwan Can Manufacturing Company, Limited, organized in 1922, with the Toyo Can Manufacturing Company as its nucleus. This Company (later merged with the Toyo Can Manufacturing Company, Limited) has made considerable contributions to the growth of the Taiwan pineapple canning industry. In 1933, the number of plants reached more than 70, their annual production exceeding 1,000,000 cases. The Taiwan Pineapple Canners Association often attempted to regularize production, but it failed to obtain effective results, while complaints were loud of inferior quality due to the exigencies of reckless manufacture under cut-throat competition. Such a situation, could not last. The officials of the Government General of Taiwan finally required all the plants to consolidate into a single organization under the title of the Formosan Consolidated Pineapple Company, Limited, for the purpose of protecting the industry from ruin. Thus it has come finally out of chaos. Taking 1930 as the base, the pack of canned pineapple in 1937 increased 2.11 fold, and the export, 21.67 fold.

PRODUCTION AND EXPORTS OF CANNED PINEAPPLE

Year	*Production*			*Exports*			
	Quantity (in cases)	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Quantity (in cases)*	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Ratio of exports to production %*
1930	520,756	—	100.0	14,297	—	100.0	2.7
1931	883,982	69.7	169.7	9,439	*34.0	66.0	1.1
1932	896,361	1.5	172.1	15,366	62.8	107.5	1.7
1933	1,118,321	24.8	214.7	93,974	511.6	657.3	8.4
1934	970,553	*13.2	186.4	99,541	5.9	696.2	10.3
1935	1,188,666	22.5	228.3	114,205	14.7	798.8	9.6
1936	1,181,084	*0.6	226.8	234,613	105.4	1,641.0	19.9
1937	1,100,000	7.4	211.2	309,833	32.1	2,167.1	28.2

*Decrease

Canned Mandarin Orange

Production of canned mandarin orange was started in the Showa Era (after 1925), by a process originated in Japan to pack attractively a raw material, unique to this country. Thus a market for this article has been developed from "scratch." That it should have reached the million case mark in so brief an interval is eloquent tribute to intrinsic merit in the native fruit. The characteristic features of the orange canning industry are that Great Britain was the first to take it and is so far the best customer, 80 per cent of the export shipments being destined to that country. The domestic demand is also fairly well sustained. The military requirements provide an especially important outlet. Since the first trial shipment forwarded to Britain in 1929 or thereabouts, export business for this product has steadily expanded, due alike to the excellent flavor of the product, its attractive appearance, and astonishing cheapness in price, making it to-day the greatest bargain in canned fruit in the world!

To illustrate how the attainment of orderly production and distribution in the interests alike of consumers, merchants and packers, is far from plain sailing but bristles with difficulties that have to be patiently overcome:—Whereas canned marine food is under the jurisdiction of the Ministry of Agriculture and Forestry in the application of the Aquatic Products Export Regulations, it happens that some of the canned agricultural products are placed under the jurisdiction of the Ministry of Commerce and Industry, as being "manufacturing" industries.

When the orange canners started to organize their association for the purpose of regulating production, they negotiated with the Ministry of Agriculture and Forestry. Finding no way of setting up any sufficient authority to prevent the natural tendency to self-destruction under that Ministry, they decided to organize an industrial association under the supervision of the Ministry of Commerce and Industry. However, due to the basic rule under this Ministry that an industrial association can be formed only with each prefecture concerned as a unit, it required two years to obtain approval from the respective prefectural Authorities for the organization of three associations, namely, the Hiroshima Orange Canners Association, the " Central " Orange Canners Association and the Tokai Orange Canners Association. A Federation was finally organized of the above-mentioned associations at the end of 1936 which obtained the approval of the Ministry of Commerce and Industry. Yet, this Federation could not get going until the end of 1937, due to lack of unanimity among the constituent member associations. Deliberations on the question of production-control were started as early as in 1934, but no agreement was reached (the Hiroshima Association and Central Association being alike opposed to limitation of their members' free expansion). Recently, these two associations advocate production control, but now it is the Tokai Association that opposes !

An additional complication is provided by the co-operative industrial associations in different localities which started production of canned orange a few years ago—the development of a " manufacturing industry " in rural districts being their aim. Moreover, there has been an increase in the number of orange canneries in " bonded-factory zones,"—involving another Authority altogether. These developments have placed the orange canning industry under the un-uniform jurisdictions of the Ministry of Agriculture and Forestry, the Ministry of Commerce and Industry and the Ministry of Finance. The situation has been (as may be imagined) aggravated. At the present writing perplexing difficulties are still being encountered with respect to affording sensible restraint and regulation. It is therefore highly desirable that the Government authorities and the private interests should co-operate in adopting a uniform system as soon as possible ; for the prevailing uncontrolled, free-for-all competition inevitably results in reckless manufacture ; this condition in turn can reflect very adversely, experience shows, on the uniform quality of the products, a fact that the long history of the canning industry has repeatedly and disastrously illustrated ; the inevitable end of the chapter being that the manufacturers are forced into the awkward position of being unable to earn legitimate profits for their enterprises, and needless " grief " is the chief reward of all concerned.

The production of canned orange increased 18.83 fold, the export 22.40 fold within the brief period from 1932 to 1937. With the Government's encouragement, the extension of orange orchards is being realized steadily, so that the annual output of fruit is more than 374,000 tons to-day. The process is still going on as the new orchards come into bearing. If 10 per cent of the total output of fresh orange were used for canning, it would be possible already to pack 1,500,000 cases of canned orange. By increasing the percentage devoted to canning and utilizing the increased production as well for the purpose, it would be easy to treble or quadruple the present pack of canned oranges. Since the measures taken in conjunction with afforestation by clothing the hillsides in orange orchards to prevent erosion, are proving so " fruitful," and demonstrating great success in the annually increasing harvests of this delicious and healthful fruit, it should be an incentive to those concerned to inaugurate just as intensive measures for the promotion of sales. This would surely prove equally fruitful in results, if the efforts were sustained.

PRODUCTION AND EXPORTS OF CANNED MANDARIN ORANGE

	Production			*Exports*			
Year	*Quantity (in cases)*	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Quantity (in cases)*	*Percentage gain or decrease (—) compared with preceding year (%)*	*Index number (1930=100)*	*Ratio of exports to production %*
1930	30,000	—	—	—	—	—	—
1931	35,000	16.7	—	—	—	—	—
1932	65,000	85.7	100.0	39,798	—	100.0	61.2
1933	150,000	130.8	230.7	111,497	180.0	280.1	74.3
1934	533,000	255.3	820.0	284,176	154.9	714.0	53.3
1935	400,000	*25.0	615.4	233,952	*18.0	587.8	58.5
1936	920,000	130.0	1,415.4	764,524	226.8	1,921.0	83.1
1937	1,224,410	33.1	1,883.7	891,544	16.6	2,240.2	72.8

*Decrease

Canned Bamboo Sprouts

Canned bamboo sprouts were the first on the list, in point of time, of canned vegetables, manufacture having been commenced about 1881. In the beginning, the principal producing centers were located in the Osaka-Kyoto district, but they are produced to-day in Shizuoka Prefecture, in some prefectures on the Japan sea coast, in Shikoku and Kyushu—Fukuoka Prefecture being at present the most important center. Canned bamboo sprouts are utilized more by hotels, restaurants and catering houses than in ordinary households, and therefore, they are mostly packed in large-size No. 1 tins with nett contents of nearly 10 pounds. More recently, they are being increasingly packed in five gallon cans.

Bamboo sprouts lead all the vegetables, with a total production in 1936 reaching 700,000 cases, of which some 80,000 cases were exported, chiefly to the Kwantung Leased Territory. They are consumed by the Japanese in the Kwantung Territory and Manchoukuo. Their next important export market is in the United States. Besides the Japanese residents in America, chop suey restaurants use considerable amounts, the ultimate consumers being the American public. Domestically the Navy is a good customer. The Army does not require it in peacetime, but consumes a great deal in wartime. Canned bamboo sprout may, therefore, be considered in the category of food products that are stimulated by War requirements.

Canned Green Peas

In point of canned vegetables production, green peas rank second. They are produced to an amount about 100,000 cases annually. Canned green peas are in wide demand, being used for Japanese, western and Chinese dishes. However, due to the fact that they are employed chiefly as a garnish, the volume of consumption is comparatively small in the domestic field, notwithstanding their popularity. They are exported to an annual amount of only about 10,000 cases, the chief market being the Kwantung Leased Territory. Canned green peas in Japan, being intended primarily to please the eye are colored by means of copper ; their flavor is thus spoiled, and furthermore there is no hope of exports to the United States and European countries in view of the strict " pure food regulations " enforced in those countries.

The world's production of canned green peas is very large. In the United States, the manufacture often exceeds 20,000,000 cases, in Canada 2,000,000 cases, in Great Britain 1,500,000 cases and in France 2,000,000 cases. Canned " green " peas are not artificially colored, nor adulterated in those countries, where they enjoy in consequence wide appreciation as a delicious and highly nutritive food. In view of these conditions in foreign countries, the packers in Japan would be well advised to pack (for export at least) uncolored green peas ; they would undoubtedly by so doing be able also to develop a wider market at home. The purchasers in Japan are generally inclined to conceive that canned green peas are principally for the decoration of dishes, and in such circumstances it is impossible to hope for an expansion of the demand of the present brightly colored but unpalatable article.

A survey conducted in Japan and based upon practically all the available latest data disclosed that the production of canned goods throughout the world amounted to 391,626,000 cases, of which canned meats and dairy products account for 19.6 per cent, canned marine food 10.3 per cent, canned fruits 18.4 per cent and canned vegetables 51.7 per cent. Of these, Japan represents, on the basis of the year 1937 figures, 1.6 per cent of the meat and dairy products, 19.2 per cent of marine food, 3.9 per cent of fruits and 0.6 per cent of vegetables. Of the total production of canned goods in Japan alone, meat and dairy products represent 9.5 per cent, marine food 58.8 per cent, fruits 21.8 per cent and vegetables 21.8 per cent.

Among all the countries of the world, the United States ranks first, producing 77.99 per cent of the world's total production of canned goods, while Japan occupies the sixth position with its output of 13,158,000 cases, or 3.3 per cent of the world's total. This wide variation between the United States and Japan, conspicuously indicates how highly the canning industry of the former has been developed.

Taking canned marine food alone, however, the difference between the United States and Japan is considerably narrowed. Of the total world production, which is set at 42,292,000 cases, the United States share is 20,000,000 cases or 47.7 per cent, and Japan's 7,735,000 cases, or 18.2 per cent.

The world's exports of canned goods amount to 52,489,000 cases annually, of which canned meat and dairy products constitute 35.8 per cent, marine products 23.6 per cent, fruits 26.8 per cent and vegetables 13.8 per cent. The survey further reveals that

Japan with only 0.6 per cent of the world's exports of canned meat and dairy products, enjoys 40.4 per cent of canned marine products, 8.9 per cent of canned fruits and 2.69 per cent of canned vegetables. Of the total exports of canned goods from Japan, meat and dairy products form 4.4 per cent, marine products 76 per cent, fruits 19.1 per cent and vegetables 3.2 per cent. In point of exports of canned marine products alone, Japan takes the predominant position by a wide margin while the United States takes second place.

Of the world's total exports of canned marine products, 12,620,000 cases, Japan supplies 40.0 per cent, or 5,103,000 cases. The figures for the United States are 2,034,000 cases, or 16.1 per cent of the world total. On the basis of the present survey, it is believed that, to promote the exports of canned meat and agricultural products side by side with those of marine foods, is the most feasible measure open as a means for contributing to the improvement of the international trade balance, which is always so greatly " against " Japan.

For purposes of comparison, estimates for last year are given as follows :

(In thousand cases)

	Cases	*Per cent*	*Ranks*
(1) World's annual total production of canned goods : (estimated)	410,102		
Of which U.S.A. produced	280,000	63.8	first
United Kingdom	22,200	5.4	second
Canada	19,230	4.7	third
Soviet Russia	18,162	4.4	fourth
Japan	13,158	3.2	fifth
Italy	8,800	2.2	sixth
(2) World's annual total production of canned marine products	46,665		
Of which U.S.A. produced	20,000	42.9	first
Japan	7,735	16.6	second
(3) World's annual total exports of canned goods	58,288		
Of which U.S.A. share	9,715	16.7	first
Japan's share	6,736	11.6	third
(4) World's annual total exports of canned marine products	16,412		
Of which U.S.A. share	2,128	13.0	third
Japan's share	5,104	31.1	first

(5) Ratios of Japan's annual production of canned goods to the World's production :

(In thousand cases)

	World production	*Ratio to total*	*Japan's production*	*Ratio to the world's production*
Meat and dairy	79,358	19.4%	1,246	1.6%
Marine products	46,665	11.4	7,735	16.6
Fruits	96,476	23.5	2,879	3.0
Vegetables	187,603	45.7	1,298	0.7

(6) The world exports of canned goods, Japan's share and their ratios :

(In thousand cases)

	World's exports	*Ratio to total*	*Japan's shares*	*Ratios to the world's exports*
Meat and dairy	19,443	33.3%	124	0.6%
Marine products	16,412	28.2	5,104	31.1
Fruits	14,272	24.5	1,282	9.0
Vegetables	8,161	14.0	214	2.9

In summing up the foregoing, it can be reasserted :

(1) Japan now occupies the fifth place in the world's production of canned goods, while holding the second rank in point of the production of canned marine products.

(2) In exports of canned goods, Japan comes third amongst the countries of the world, while enjoying the leading position in exports of canned marine products.

(3) With respect to agricultural products—dairy and meat products and fruits—Japan is far behind the leaders, but the industry can be developed to a fairly substantial extent, if the growing of suitable raw materials for canning is sought, and provided cattle-raising is encouraged ; for the topographical and soil conditions in the Japanese Empire are adaptable to a wide variety of fruits and vegetables, while the Japanese agriculturalist is not to be excelled in skill and in his capacity for taking infinite pains to attain perfection in quality production. The technique of those engaged in the packing industry is to-day of high order ; their sense of responsibility to the ultimate consumer is well developed ; and the watchful eye of the various Governmentally approved organizations is never " asleep on the job " of protecting the interests of all concerned against any accidents and lapses that might occur.

So that all in all the prospects for steady growth in the importance of the canning industry, and of its increasing relative importance in the roster of the nation's trade were never brighter than they are to-day.

IRON FROM PEKING

The Shihchingshan iron foundry in the suburbs of Peking, which has been idle for the last 19 years, was put into operation on November 20, with close collaboration between Japanese technicians and Chinese workers.

Under the supervision of the Japanese military authorities, the foundry is under the joint management of the Hsingchung and Nittetsu firms.

About 120 Japanese staff officials, technicians, and skilled workers are now directing more than 1,000 laborers in the plant, which is turning out daily Y20,000 worth of rails for shipment to Japan.

Situated some nine miles west of Peking, the foundry has four 120-foot chimneys which daily belch forth columns of white smoke.

Although the Shihchingshan foundry is not as large as those in Japan, it has a bright future because of its proximity to iron ore, coal, and lime which are abundant in North China. It is said that North China has about 120 million tons or more of iron ore, or more than half of the iron ore in all China.

The foundry was first projected by President Hsu Shih-chang of China as a 5,000,000 yuan foundry of the Lungyen company. But because of the continuous civil wars and the sharp fall of the price of iron following the World War, the plant was abandoned before it was fully completed.

For the 19 years since then it has been left unused and weeds covered the 250,000-tsubo compound of the factory.

Hsingchung and Nittetsu having agreed to act as joint managers, the work of reconstructing the factory was commenced last April. The furnace was fired by Hachisaburo Hirao, highest economic adviser in North China, on November 20, for the first time in 19 years.

To revive the activities of the plant, Japanese technicians and experienced workers were called from Japan despite the lack of labor at home.

With no up-to-date machines or skilled labor, the factory uses 50 very old Chinese units for making coke needed for smelting and other purposes at the foundry.

The neighboring mountains are still hiding places for bandits who sometimes attack the plant. Accordingly, the workers of the foundry work in the daytime, guard plant at night, and co-operate with servicemen in the pacification activities during their spare time.

Recently the management of the foundry let 36 native villages of the neighboring region organize the Shihchingshan industrial region protection society and began employing peace-abiding villagers as workers. There are already more than 1,000 of these native workers.

Chief Tabata of the foundry said to the interviewer : " We are suffering from the dearth of skilled labor. You see, to train Chinese into full-fledged workers will take at least three years. I hope that more skilled workers from Japan will come."

Malayan Forests and Their Utilization

By H. E. DESCH, P.A.S.I., B.SC., M.A. (OXON), Wood Technologist, S.S. and F.M.S.

(The Asiatic Review)

The British sphere of influence in the Malay Peninsula embraces an area of approximately 50,000 square miles, of which nearly 77 per cent is classified as "forest land," about 20 per cent being reserved forests set aside to guarantee timber and water supplies in perpetuity. In theory this area is administered by separate forest departments in the different Federated and Unfederated States, but in practice there is a unified Malayan Forest Service, administered by the Director of Forestry, Straits Settlements, who is also Adviser on Forestry, Malay States. This officer has executive authority over the headquarters establishment at Kuala Lumpur and the research organization at Kepong. In addition, after consultation with the administrations concerned, the transfers of officers throughout Malaya are made on his advice. Finally, the Director makes periodical visits to the Malay States outside the Federation in an advisory capacity, and on the invitation of the Governments of those States.

The aims of the forest department are to make the country self-supporting in timber and firewood, to protect water supplies and guard against wholesale erosion, and to prevent the wanton destruction of timber on land earmarked for ultimate alienation for some specific purpose—e.g., farming, mining, rubber production. The policy has involved the creation of reserved forests in various localities, and forest rules that govern the removal of forest produce anywhere in the Peninsula. These rules have legal status by reason of forest enactments that have been passed from time to time.

At present Malaya is an importing country as far as forest produce is concerned, but at the same time there is a considerable export trade, mainly of inferior-quality timber. It is probable that imports will continue to exceed exports for many years to come, but there are indications that the export trade is growing. It is not envisaged, however, that all the forest reserves, as now constituted, will necessarily always remain so, while other areas not yet explored will no doubt be added in due course. The area reserved may appear large, if judged solely by its ability to supply local requirements, but not if the protective value of forests and their influence on the climate are taken into consideration. Excisions and adjustments of area to keep pace with industrial and other developments will doubtless be necessary, but until an overwhelming case is made out their continuance as forest must be guaranteed.

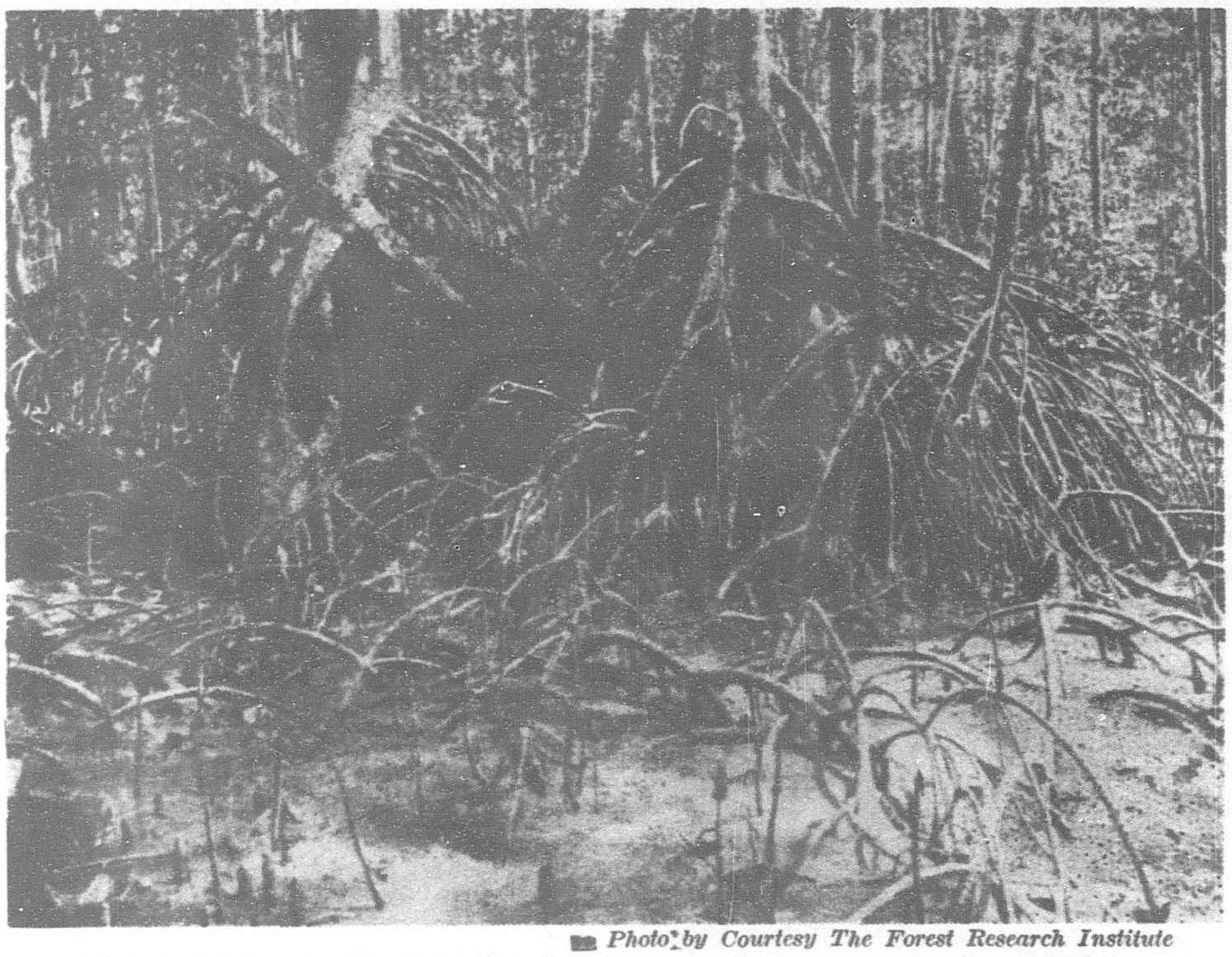


Photo by Courtesy The Forest Research Institute

Fig. 1.—Mangrove forest. Note aerial roots that are covered by high tides

The forests of the Peninsula lie within the tropical rain-forest belt, the tree species being of the evergreen type. The climate is equitable throughout the year, without any marked seasonal changes, except on the east coast, which comes under the influence of the north-east monsoon. Rainfall varies in different parts of the Peninsula from as low as 70 to more than 150 inches per annum, and over large areas is in the region of 100 inches.

The precipitation is spread over the whole year, although maximum periods tend to occur bi-annually, centered around the months of November and April: it is unusual to experience more than three to five consecutive days without rain. Temperatures exhibit similar moderation, the daily range on the plains being between 70° and 90°F. These conditions result in luxuriant vegetation that more nearly conforms to the traveller's "impenetrable jungle" than do most tropical forests. Moreover, in their natural state the forests were uninhabited, except for primitive tribes in the hills and fisher-folk along the rivers, and before the advent of European development in the Peninsula the forests were not cut up by well-worn trade routes as, for example, are those of the west coast of Africa.

Five well-developed types of forest may be recognized in the Peninsula: (1) Littoral forests, including the mangrove swamps and beach forests; (2) fresh-water swamp forests; (3) low-land dipterocarp forests (up to 2,000 feet); (4) high-hill dipterocarp forests (2,000 to 4,000 feet); and (5) mountain forests.

(1) *Mangrove swamp forests*.—These cover an area of more than 460 square miles, chiefly on the west coast. They are worked intensively on short rotations for firewood, charcoal, and poles. Normally the canopy is closed, the area being covered with a pole crop up to 80 feet in height, with girths up to five feet, and a few large trees left over from previous rotations. The species are few, typically with stilt roots and other adaptations for growing in a soil unsuited to most plants, and an undergrowth is practically non-existent. Large areas are inundated twice daily at high tide, but the higher ground may be inundated only by spring tides. The soil varies from almost liquid mud to relatively stiff mud.

Beach forests.—These occur wherever there are no mangroves or rocky headlands that bring the inland flora down to the sea. The forests consist of a narrow belt on the sea coast, rarely more than a few chains wide: casuarina trees dominate long stretches of this belt, particularly on the east coast, but elsewhere this species may be mixed with or replaced by some half-dozen littoral tree species. The beach forests have no economic value.

(2) *Fresh-water swamp forests*.—These cover extensive tracts of alluvial flats near the coast. Until recently, when sawmills fed by light tramways have opened up considerable areas of these swamps, they were of little economic value. The tree species are few in number compared with the inland-dipterocarp forests, and frequently characteristic of this type of jungle. The individual trees do not attain the dimensions of the dominants of the inland forests proper, and palms and screw pines often constitute a considerable proportion of the forest cover. The commercially important trees include two species of *Shores* of the red meranti class, punah (*Tetramerista glabra* Miq.), geronggang (*Cratoxylon arborescens* Bl.), and melawis (*Gonystylus* sp.). The soil, which

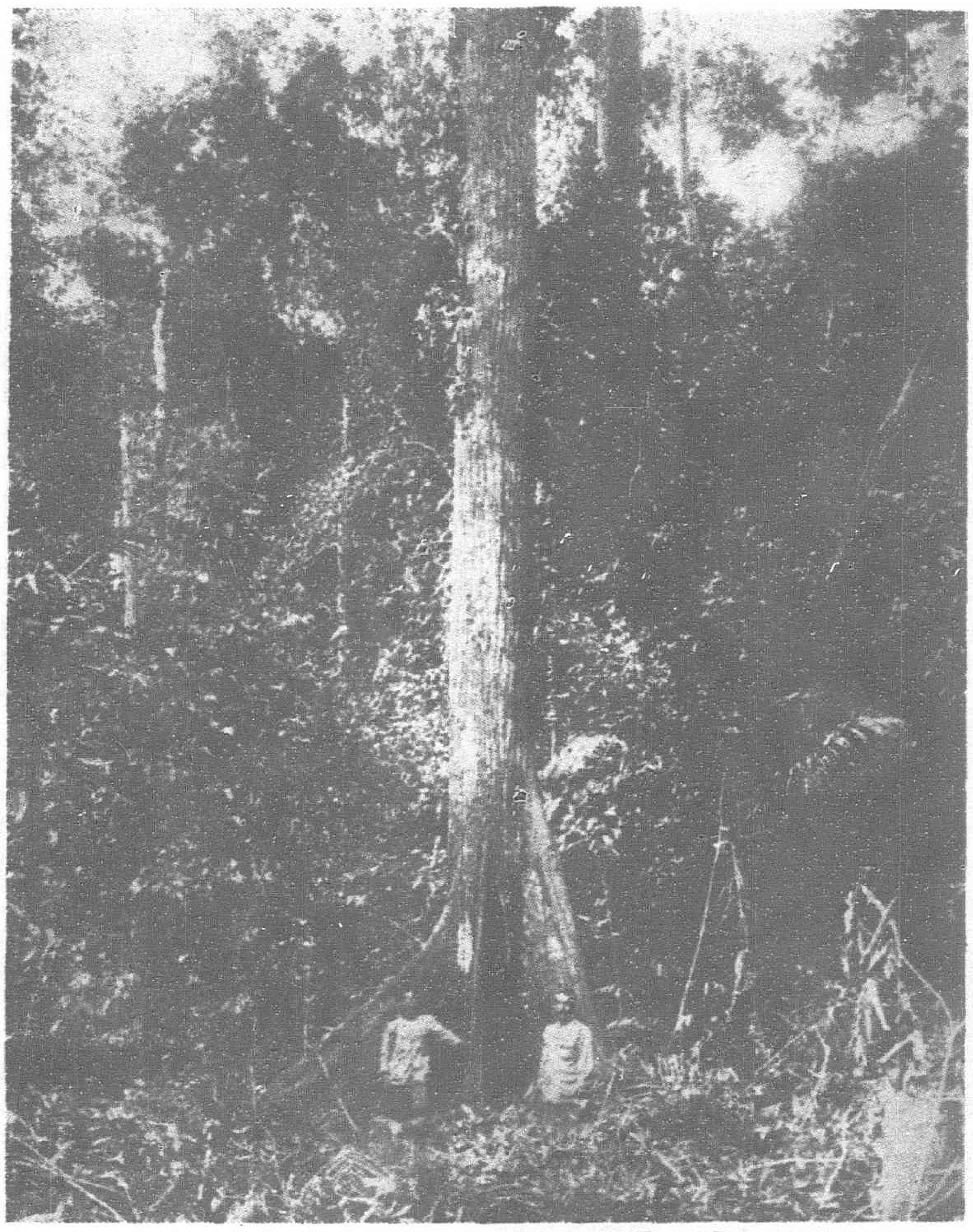


Photo by Courtesy The Forest Research Institute

Fig. 2.—Fresh water swamp forest. Tree in foreground is *Shorea rugosa*, a source of commercial *dark red meranti*

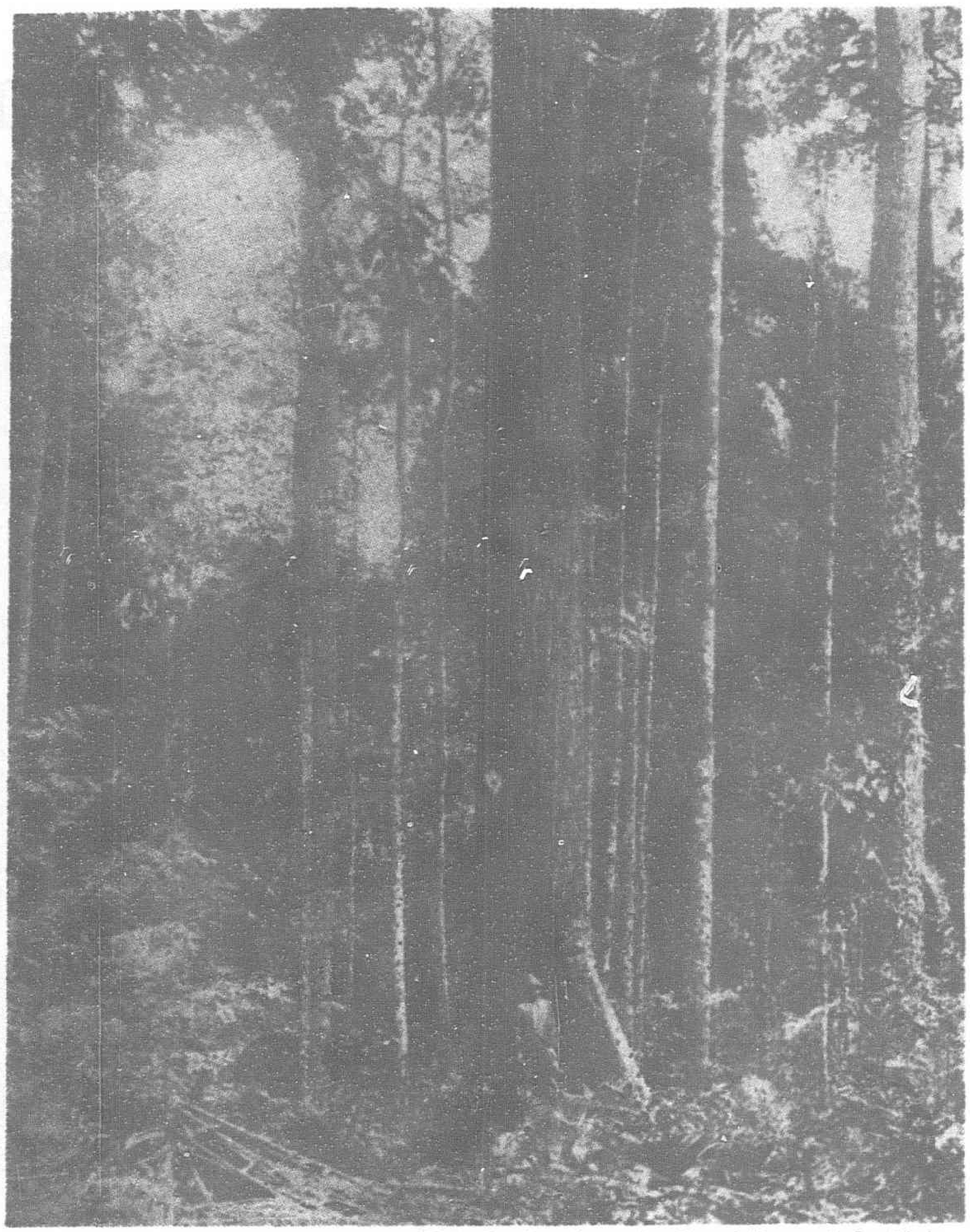


Photo by Courtesy The Forest Research Institute

Fig. 3.—Hill-dipterocarp forest. Tree in foreground is *Shorea Curtisii*, a high-grade, *dark red meranti*

is peaty to a depth of several feet, is often inundated after rain.

(3) *Low-land dipterocarp forests.*—It has been estimated that this type of jungle at one time covered at least 75 per cent of the land area of the Peninsula, and it is probable that it still represents 60 per cent of the total. Forests of this type constitute the bulk of the commercially exploitable jungle, and represent the timber capital of the country. They consist of an upper story, often averaging over 150 feet in height, in which dipterocarp species abound (meranti, balau, keruing, chengal, etc.), but they also contain representatives of practically all the other commercially important timber species of the Peninsula, except mangroves. There are usually several under-stories of pole species, a thick shrubby undergrowth, and an abundance of climbers, including rotans, that weld the whole into a well-nigh impenetrable mass. These forests also provide several minor products, of economic value—e.g., damars that are used in the manufacture of varnishes, and jelutong used in the manufacture of chewing-gum. Probably upwards of 2,000 tree species occur in the low-land dipterocarp forests, and although only a few are of outstanding importance the majority are a potential source of timber for some purpose or another. Although these forests have suffered considerable inroads in the past, they are still capable of providing an appreciable annual out-turn of serviceable timber.

Hill dipterocarp forests.—Running down the Peninsula, but petering out in Johore, is the Main Range, and there are two or three subsidiary ranges. These are high hills up to 4,000 feet above sea-level, with peaks exceeding 6,000 feet. Although slopes are steep and outcrops of rock are numerous, the hills are covered with tree growth. Between the 2,000 feet and 4,000 feet contours dipterocarps predominate, but of different species from those in the plains. Towards the altitudinal limits, dipterocarps become scarce and the character of the jungle becomes markedly different. The forests carry a considerable stand of potentially merchantable timber, but except where hill stations have been developed, inaccessibility has preserved them from exploitation and is likely to do so for a long time to come. In character these forests are rather more open than those in the plains, and the dominants do not attain the same maximum dimensions, but one or two species tend towards a gregarious habit.

Mountain forests.—These forests occupy the upper slopes of the principal high-hill ranges and the tops of the mountains. Several sub-types may be recognized, corresponding with altitudinal zonation. The hill dipterocarps give way to the mountain-oak forests, which in turn are replaced by mossy forest or xerophytic scrub. The forests have no economic value as a source of timber supplies, although several species may prove useful for local building purposes. The soil cover is important, however, as protection against excessive erosion, and for regulating stream flow to the plains.

Reviewing the position as a whole, it may be said that the mangrove forests are more or less static in area, and they are to-day under intensive and controlled working. The fresh-water swamps are not well known, and until recently they were seldom worked. To-day appreciable areas are being exploited by comparatively small, semi-portable mills. No special rules are in force to safeguard the future of these forests, but, from the young regeneration coming up, there are indications that the regrowth will not be inferior to the existing crop. The low-land forests have suffered most in the past; the ten per cent of the total land area that is at present under rubber was once under forest of this type, and other areas have been cleared for mining or agricultural settlement. Nevertheless, a considerable area has been reserved, and large tracts are being exploited intensively by small mills of the type already referred to, instead of being denuded of one or two especially valuable timber species. The hill dipterocarp forests have suffered but little from the opening up of the country, although considerable areas have been destroyed by shifting cultivation by the hill tribes. These forests are likely to escape serious inroads for many years to come, and large tracts are preserved as water-catchment areas. The mountain forests have undergone least change of all, but agricultural development and the creation of hill stations may cause reduction of area in the future.

The present forest policy is aimed at improving the growing stock in reserved forests and encouraging the intensive exploitation of those areas that may eventually be alienated for some specific purpose. The problem in the reserves is to increase the proportion of valuable timber species. This is being done by removing unwanted species, either by commercial workings under permit or by departmental operations at Government expense. Operations are designed to open up the canopy gradually, thereby producing sufficient light for young seedlings to develop, but at the same time protecting them and the soil against deterioration. When the young crop is established, the remaining trees of the mature crop are removed.

Where there are good local markets for forest produce the unwanted species are removed first, in firewood or pole fellings. Alternatively, in the last two or three years semi-portable mills that take all, or practically all, species of timber size have been erected. Mill-owners have received official encouragement by remittance of royalty on the less popular species, combined with permission to remove a certain proportion of the wanted species that ordinarily would not be felled until the young regeneration was well established. In the absence of local markets improvement fellings have to be carried out at Government expense. Several methods have been tried, and the one in most general use to-day is to poison-girdle trees of the unwanted species. Whether commercial workings or departmental operations have been adopted for the first stage, the second is the same in both cases: when the young regeneration is established the overwood of valuable timber trees is removed in a revenue-producing final felling.

The local timber market is not a highly critical one as regards the segregation of species or the grading of produce, but it is conservative. The former method of exploitation by hand-sawyers resulted in selective working: only those timbers that were easy to convert with hand tools were taken. Moreover, local practice in the utilization of wood placed all but the most durable at a disadvantage: design of structures did not follow scientific principles that reduce the incidence of fungal and termite attack; seasoning, except for a little surface-drying of boards on the building site, was unknown; and wood preservatives were not in use. The combination of selective working and bad utilization resulted in marked preferences for certain timbers and strong prejudices against others.

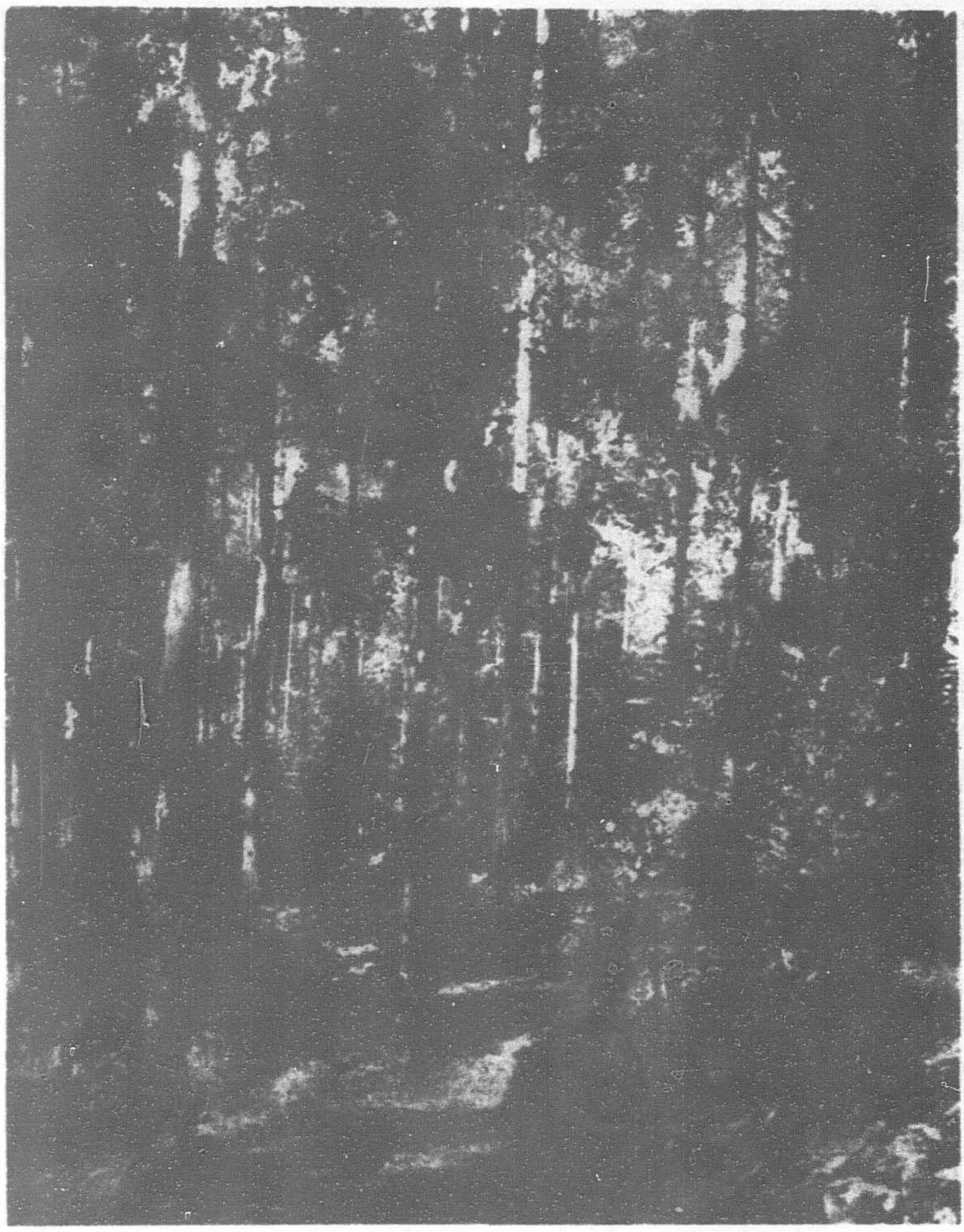


Photo by Courtesy The Forest Research Institute

Fig. 4.—Naturally regenerated forest of *Kapur* (Dryobalanops Aromatica) about 26 years old: Low-land dipterocarp forest

But the buyer was not and is not always competent to recognize his timbers, and the astute producer has traded on this. In consequence, the few timbers that are known to the market are not so much individual species but timber classes. For example, the standard general utility timber, that takes the place of "deal" or Baltic redwood on the home market, is *meranti*. Because of the large number of closely related species in the jungle, this may properly be regarded as the product of over thirty distinct botanical species of the genus *Shore*, but in practice trade *meranti* may consist of any of these, and as many more of different genera and families. These latter woods may lack several of the qualities of genuine *meranti*, but being superficially similar in appearance they are accepted. On the other hand, many other timbers that are superficially distinct, and which are perhaps difficult to convert by hand, are rejected irrespective of their intrinsic merit. This is a factor of some economic importance now that sawmills have rendered a much larger number of timbers exploitable: all those of the general utility class that are not sufficiently similar to pass as *meranti* have to be sold unclassified at lower prices. Moreover, there is no empirical knowledge on which to judge the new timbers. The research branch of the forest department is, however, tackling the problem, and special studies of the commoner, but at present largely neglected, timbers are in hand.

The local timber market operates under another and more pertinent handicap—namely, the widely fluctuating demand, and concomitant fluctuations in price, of timber. The trade of Malaya, and the prosperity of the country, is bound up with the fortunes of the country's two major industries—tin and rubber. Although the largest producer of these primary products, Malaya has no say in their consumption, with the result that her domestic position is in a constant state of flux. So pronounced is this influence, however, that the chairman of a large local trading firm was constrained to point out that "normal" times are unknown to the country! The effect on the timber industry is most unfortunate. For example, at one time last year ½-in. boards were fetching almost $60 (£7) per ton of 50 cubic feet, but by the close of the year this price had been halved. Moreover, at the time of peak prices mills were working all out, almost any tree of sufficient size was converted, and there was a rush of applications for sawmill sites, while to-day some of the existing mills are working only five days a week, or are closed down, and the preference for some tree species to the exclusion of others is again very noticeable. This frequent swing in production and consumption of timber accentuates the already difficult problem of controlled forest management in the tropics. The forest department has the position in hand, however, and is taking steps to protect the young sawmill industry against excessive zeal in times of prosperity: it is proposed to introduce a system of licensing of all mills. New propositions will be considered in relation to potential markets, and the suitability of the sites and equipment proposed. Those that are approved will be given technical advice in the layout of plant, and a guarantee of an adequate area of forest over a period of years. It will be appreciated, however, that with domestic requirements in so fluid a condition it is very difficult to plan a long-term policy to the best advantage.

Since its inception in 1901, the forest department has been an important contributor to the revenue of the country, and, except for the period 1931 to 1933, has always been able to show a considerable surplus over expenditure. The total revenue from 1901 to 1935 amounted to $36,042,335, and the surplus of revenue over expenditure was $11,094,906. Moreover, the total deficit for the three years 1931 to 1933 was more than recovered in 1934. The surplus for 1935 was over 250 per cent up on that for 1934, and in 1936 there was a further gain of 50 per cent over the figures for 1935. The rising trend has been more than maintained in 1937, but with the present prices for tin and rubber is not so likely to be repeated this year.

The picture portrayed in the preceding paragraph cannot be matched by other colonies, and, in that it has been achieved without a reduction in marketable forest capital (the alienation of lowland forests for rubber cultivation was not made in the interests of forest revenue), finds a parallel within the Empire only in India. The forest department would, however, be the first to disclaim sole credit for this achievement, recognizing that its prosperity is

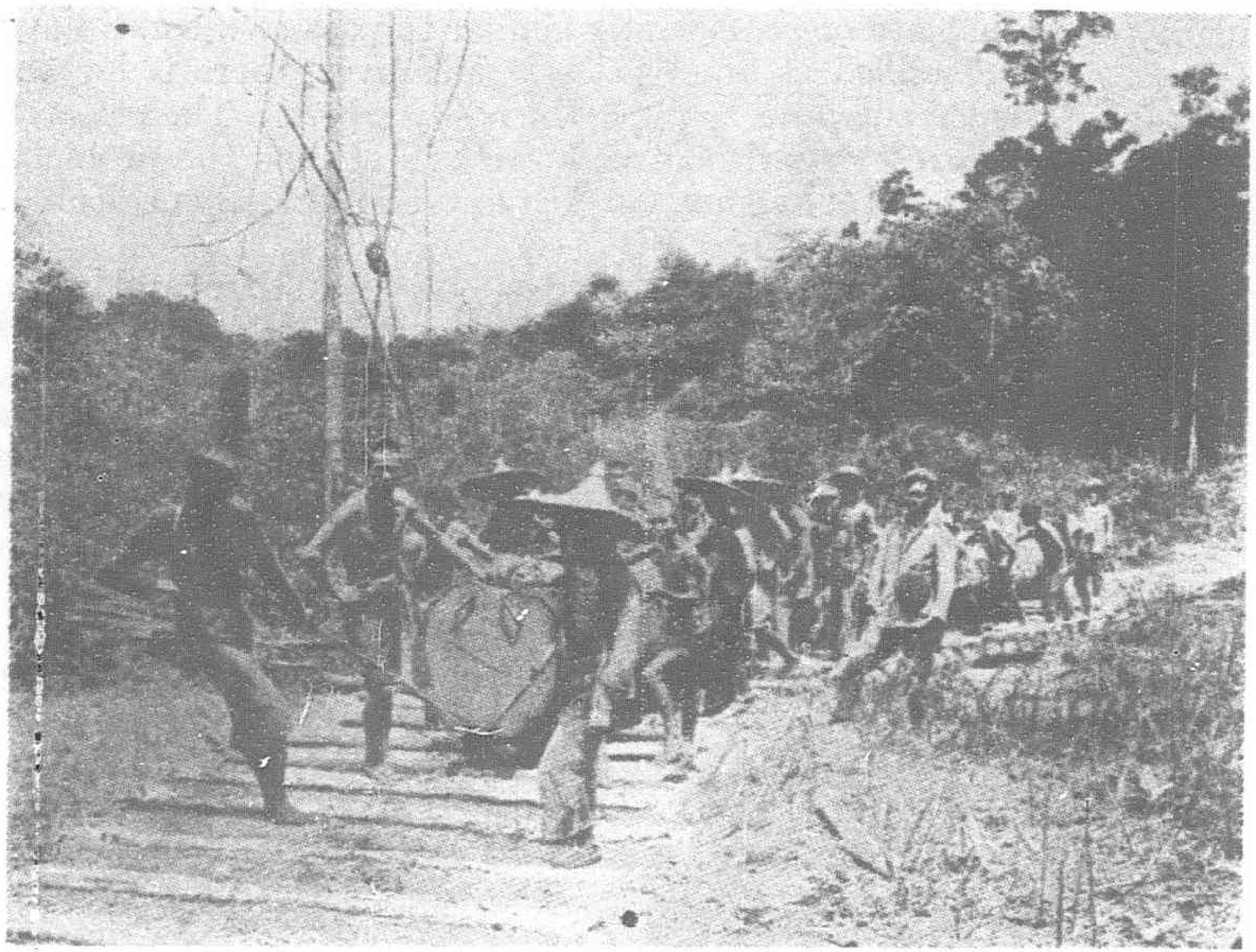


Photo by Courtesy The Forest Research Institute

Fig. 5.—" Panlong " extraction. The log is mounted on a sledge (see Fig. 6) and hauled over greased poles by coolies who wear a webbed harness

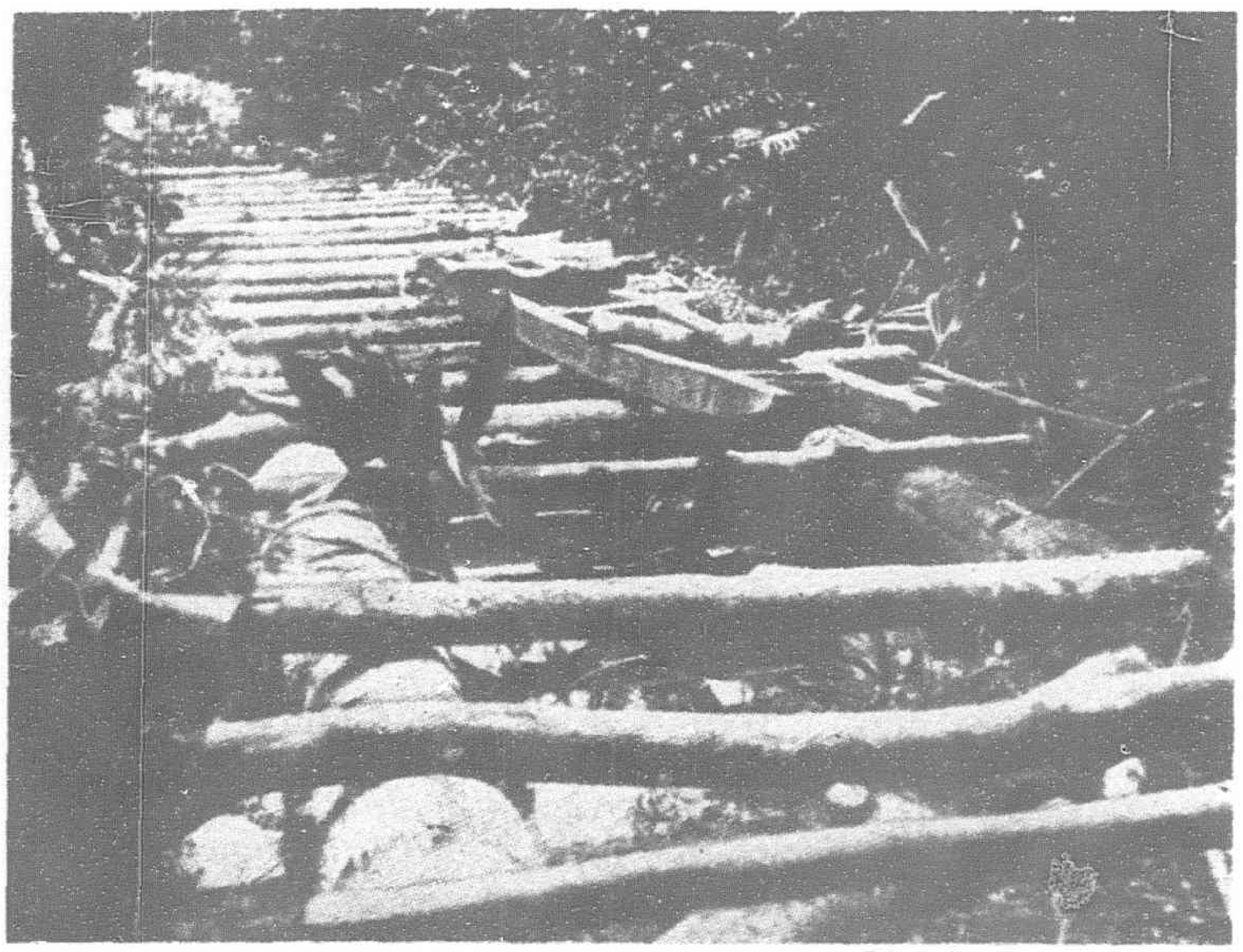


Photo by H. E. Desch

Fig. 6.—A short length of Panlong, with timber sledge. The longitudinal runners are grooved to take the poles, but the latter are not otherwise secured in position

bound up with that of the country as a whole. At the same time the present tends to weigh heavily with the critics, as was experienced in 1932, and it is pardonable to resent a short-term criticism of a long-term venture.

The out-turn of timber from the forests of Malaya (including Brunei) was 12,029,944 solid cubic feet in 1936. In addition, imports of saw-logs (mainly from the Netherlands Indies for conversion in the sawmills in Singapore) totalled 99,784 tons of 50 cubic feet, equivalent to about 2,500,000 cubic feet of sawn timber, and imports of sawn timber and teak a further 400,000 cubic feet. But these figures by no means represent the total Malayan trade in timber and forest produce. Including poles and fuel wood, the total out-turn of major forest produce from Malaya and the State of Brunei reached the formidable figure of 32,495,229 solid cubic feet in 1936! The value of minor forest produce, including dammar, jelutong (a constituent of chewing-gum), rattans, and guttapercha, added a further $180,593 to these totals. In addition, imports of round wood, firewood, charcoal, etc., amounted to 94,729 tons, the figures for round wood being in tons of 50 cubic feet and those for firewood and charcoal in tons weight. Finally, imports of manufactured timber goods, including plywood chests, furniture, and wooden ware, totalled $1,443,610.

The economic significance of the trade will become apparent when the figures cited are turned into money values. Accurate statistics are not available, but if we take the low minimum of $20 per ton for timber, and $5 per ton for fuel wood and poles, a very conservative estimate is achieved. This estimate is as follows:

ESTIMATE OF VALUE OF MALAYAN TRADE IN TIMBER AND MINOR FOREST PRODUCE IN 1936

	$
12,029,944 solid cubic feet of timber, or, say, 240,600 tons, at $20 per ton	4,812,000
Minor forest produce	180,590
Firewood, poles, etc., 20,465,285 solid cubic feet, or, say, 410,000 tons, at $5 per ton	2,050,000
Total imports unmanufactured timber, fuel wood, etc.	2,422,800
Total imports manufactured timber (plywood, furniture, and wooden ware)	1,443,610
Total	$10,909,000

The figure of nearly $11,000,000 represents more than one and a quarter million pounds sterling, a small proportion of the total trade of the country, but a not inconsiderable factor when its true perspective is appreciated. In the first place the trade is not by any means a wasting asset, being concomitant with an amelioration of the capital resources of the country. In the second place, the results have been achieved by a revenue-earning department that, except for a short period coincident with a major world-wide slump, has always shown a surplus of revenue over expenditure, and in 35 years has earned over four million pounds sterling for revenue. And finally, the trade has provided considerable earning and spending power to a large labor force. This last factor is of some importance because wages in forestry enterprises tend to be lower than in many industries, but the percentage of labor costs to total costs is exceptionally high.

Perhaps the most interesting feature of the timber trade of Malaya is the development of the sawmill industry. This is of comparatively recent growth, as may be gauged from the fact that the number of mills has more than doubled in three years: by the close of 1934 there were 22 mills in the Federated and Unfederated States, but by the end of 1937, 49 mills were in operation and others were under construction. These mills are of the semi-portable type, powered by horizontal wood or sawdust burning steam-engines of 90 to 120 h.p. The typical layout consists of a 72-in. circular breakdown saw and three to five smaller resaw units. In the larger mills the breakdown saw has a rack bench, and the resaws have drag-feed benches for boards, planks, or scantlings, and a hand-fed bench for waste. In addition, there is a winch for log haulage and a grindstone for filing saws. Power is transmitted by belts from an overhead or underground pulley shaft. The intake of logs varies from 15 to 60 tons of 50 cubic feet per eight-hour day (seven hours sawing time and one hour for resharpening saws and manipulation of logs). The maximum daily output is 30 to 35 tons of converted timber in board and scantling sizes.

The development of the sawmill industry is of more than parochial interest. It has been demonstrated that several species that have been neglected in the past because of their recalcitrant working qualities with hand-saws present no difficulties with machine tools. This fact transfers many more species to the merchantable class, resulting in more intensive working of the forest. Moreover, "frontage scratching" is no longer justified, because intensive working permits of expenditure on improved methods of extraction—i.e., metalled roads and light tramways. These in turn allow of the handling of larger logs of greater length than is possible with animal haulage, and extraction can be expedited, reducing the incidence of borer attack in certain timbers. The net result in the long run must be a reduction in timber prices to the consumer, although so long as hand-sawing and mill-conversion exist side by side inflated prices are liable to persist to the benefit of the mill-owners.

In conclusion, a few remarks about the export trade in unmanufactured and manufactured timber may not be without interest. The total value of this trade in 1936 amounted to $735,906, or rather under £100,000. By far the largest item in this total was the export of sawn timber, amounting to $480,680. For many years the largest market was Hongkong and China, but in 1936 there was a falling off in this trade, which was, however, more than offset by gains elsewhere. In 1936 the Netherlands Indies became our best customer, and this position was strengthened in 1937, partly as a result of the Sino-Japanese conflict. Other important low-grade markets are those of Mauritius and Arabia. Exports to the United Kingdom are of recent growth, originating from special efforts during the slump years. From small beginnings the volume of business has grown gradually until exports in 1937 totalled 25,773 cubic feet.

Only a small proportion of the Malayan output is suitable for the exacting requirements of the British market, but the present position is no criterion of eventual attainments. Moreover, unlike the West African forests, the Malayan ones do not yield a large percentage of valuable ornamental timbers: those that occur in sufficient quantity for export are of the general utility class. In consequence it is only the cream of the production that is able to stand the high homeward freight charges. Further, the local demand for timber is such that only good prices will tempt the producer to cater for the high standards of an exacting market. Nevertheless, the changes that occurred in the last quarter of 1937, when all previous records were easily beaten, are an indication of what may be achieved if a steady flow of orders at a fair price is maintained. The present organization alone could probably treble its production of high-grade produce if prices and freight charges remain unchanged.

The principal timber at the moment is keruing, equivalent to Philippine apitong, Siamese yang, and Burma gurjun—and by equivalent is meant synonymous with. These timbers frequently reach the consumer as Philippine or Bornean teak! Next in importance to keruing is meranti, equivalent to Philippine lauan and the Bornean serayas and "cedars," but often sold as Philippine mahogany. Other timbers that have been exported are jelutong and kapur (equivalent to Borneo camphor wood).

Meranti and kapur suffer from the disadvantage of being frequently attacked, when living trees, by boring beetles. The particular insects concerned are incapable of living in dry wood and so are not a source of infection to unattacked timber, but they do leave more or less conspicuous tunnels in the wood. Such timber is the equal of uninfected material so long as the tunnels are not sufficiently numerous to weaken it or spoil its appearance, but it finds no favor on the home market. The frequency of borer attack renders a large proportion of the output of these timbers unsuitable for the prime grades, and the necessity for disposing of the whole production is a definite counter to unlimited expansion of the export trade.

One other item of interest is the growth of the local production of plywood, principally for rubber chests. Imports are still many times in excess of exports, but there are indications that much of the prejudice against the local produce is dying down. The agency system, however, whereby rubber estates buy their requirements through their local agents, who are also agents for European exporters, is a stumbling-block to a true valuation of the Malayan article.

The Opium Problem

(Continued from page 15)

(5) Opium dealers and smoking houses will be strictly supervised and in several years the Government will sell directly to addicts and every smoking house in the country will be managed directly by the Government.

(6) The profits of the several Government-managed smoking houses will be used for improvement of facilities to treat drug addicts. When necessary, assistance will be given by the Government out of the profits accruing from the monopoly.

(7) By the end of 1939 morphine in the prepared opium will be regulated so as to alleviate the smoking habit. Opium ashes must be delivered to the General Opium Monopoly Bureau and its use prohibited.

(8) Names of the cured addicts will be struck off from the register.

(*d*) CULTIVATION AND HARVEST OF OPIUM.—(9) In accordance with the policy to eradicate completely opium evils within ten years, only such amount as is necessary will be cultivated within the Government designated areas.

(10) The harvesting of crops within the designated areas will be supervised by the Government.

(11) Illegal cultivation, trafficking, buying and selling, smoking or otherwise using opium will be strictly prohibited.

(12) Purchasing and selling prices of opium will be determined with a view to ultimate eradication of the opium evils.

(*e*) SUBSTITUTE CROPS FOR POPPY.—(13) The Government will recommend proper crops and give assistance to farmers who will be affected by the gradual reduction in the allotted area for poppy and obliged to change over to the cultivation of some new crops.

(*f*) ENFORCEMENT.—(14) The Concordia Association (Hsieh-ho-hui) will take the lead in starting the national abstinence movement among the people.

(15) The Government will introduce laws, regulations and the systems necessary to carry out with greater efficiency the opium policy.

(16) As the Government will gradually take over the smoking houses, etc., the Government will assist in the search for new positions for the affected licensed dealers in opium.

(17) Henceforth careful and earnest attention will be given to medical treatment of addicts, while the construction of hospitals and, the giving of other facilities, will be first started in the cities and districts wherein are found the largest number of addicts.

(18) No Government or other public officials, soldiers, officials and employees of special companies or students will be permitted to smoke opium. If there are any addicts within the aforementioned groups, they will be subject to dismissal. Henceforth no addicts will be engaged by the Government or special companies or admitted into schools.

(*g*) PROHIBITION OF THE USE OF NARCOTICS.—The use of narcotics will be strictly prohibited from 1938 except for medicinal purposes. Like opium, the manufacture, import, export and sale of narcotics will be managed rigidly by the Government, while the general public will not be permitted to purchase, sell or otherwise deal in or own or possess narcotic drugs.

Kodama Welcomes China Investments

"Co-operation of foreign capital, with an understanding of our real intentions, is just what we are wishing for," said Mr. Kenji Kodama, President of the Central China Rehabilitation Company, on his arrival in Shanghai on November 28.

Soon after debarking from the *Hakozaki Maru*, Mr. Kodama issued a formal statement on the new policy company in which he declared that the company's sole aim is the economic reconstruction of Central China. The rights and interests of third Powers will not suffer through its activities.

Accompanying Mr. Kodama were Mr. Kaname Hirasawa, company Vice-President, and Mr. Saburo Sonoda and Mr. Kyoichi Yurani, directors.

Establishment of the company, said Mr. Kodama's statement, is a direct and vital expression of economic co-operation between China and Japan. Pointing out that Central China may be regarded as the industrial center of the nation, because of its dense population and concentration of natural resources, the statement continued:

"The company is a foundation for the establishment of permanent peace in East Asia. For the rehabilitation of various industries, large amounts of capital and technical skill will be required.

"The company, as a pioneer in the economic reconstruction of Central China, will participate in the investment and management of principle enterprises likely to promote industry and trade.

"The company at present is ready to use Y100,000,000 supplied by the Japanese Government and public. This money, I wish to say, will be used fully and properly by both Japanese and Chinese.

"I am glad to announce that seven concerns connected with the company already have been established under the jurisdiction of the new Nanking Government. They are the Central China Iron Manufacturing Company, the Central China Hydroelectric Power Company, the Shanghai River Navigation Company, the Central China Electric Communication Company, the Shanghai Real Estate Company, the Central China Motor-car Company and the Central China Marine Products Company."

Japan's Machinery and Tool Industry

(The Japan Advertiser Annual Review)

The machinery and tool industry is the fulcrum on which Japan is resting the gigantic lever of money and goods it hopes will lift the nation to the level of victory, both military and economic.

This pivotal industry has a formidable, five-fold task. First it must equip factories to turn out enough munitions and military goods to keep the army and navy in the field in the present incident. It must concurrently prepare the nation to hold its place in a heavily armed world. It must furnish the machines with which Manchoukuo is to be industrialized, a tremendous job even if taken alone. It must help develop North China and, later, it must equip Japan again to face world competition in trade.

Also essential basic industries are chemicals, metals and mining. But machinery is a prerequisite to development of the three.

Strengthening of the industry that makes locomotives and automobiles, lathes for rifles and looms for cloth, that makes the machines and tools which in turn raise the power of men, has become the prime occupation of the Government.

Government Lends

In a time when capital is relatively scarce, the Government has keyed its monetary policy on this industry's needs, and is lending its own funds to machinery and tool companies. In a time when imports are being cut to the bone, at least sections of this industry are encouraged to import more and more raw materials, without paying any tariff at all. This industry's welfare is placed even above the Government's drastic need for tax revenues.

To improve the cohesion of the heretofore rather loosely formed industry and so perhaps to make its chances better for achieving its high aim, the Government has moved in with its strongest control measures.

Whether the industry can do all that, it must if Japan is to carry out its plans, depends upon the obvious factors of capital, raw materials (largely metals) and trained operatives. There is no question of profits; for years to come, the prospects are that earnings will exceed the limits likely to be fixed on dividends.

Under the more or less direct guidance of the military, the industry apparently has built solidly since 1931. There was, however, comparatively little to start with. In 1931, the industry's total production in the yen of that year was Y443,340,000. In two years, the output rose 81 per cent to Y805,115,000. During the same period the number of workers employed increased about 50 per cent, to a total of 249,000. However, at that time, the end of 1933, there were 7,850 machinery plants in Japan, of which only about 1,100, or 14 per cent, used more than 30 employes.

Gain 423 Per Cent

After a yearly gain of 48 per cent in output in 1933, the rate of increase has steadily declined as the industry attained greater and greater size. The 1934 increase over the preceding year was 34 per cent, 1935's was 29 per cent, 1936's was 16 per cent and 1937's (estimated) was 17 per cent. Not allowing for the increase in prices, the yen value of the 1937 output was 423 per cent above 1931 (The 1937 production was estimated at Y1,874,000,000).

At the outset of Japan's industrialization, machines were imported for domestic operation. Busy becoming one of the leading manufacturing nations, particularly in textiles, Japan neglected machine-making. Years of acquaintance with machinery seemed necessary before the more difficult processes of making the instruments could be mastered. The more delicate precision machines still are mostly imported, although the equipment and operatives for producing them domestically are slowly being acquired.

With foreign machines well made and cheap, the domestic industry has found virtually its only stimulus in wars. The Sino-Japanese War of 1895-6 gave the industry its start. But the first real impetus for an important branch was supplied by the Russo-Japanese War of 1904-5, which increased the demand for lathes only five years after the first Japan-made lathes were produced (by the Ikegai Iron Works, Tokyo). The World War, with its dampening of imports, provided the next stimulant.

After growing slowly during the 1920's, the industry was sent suddenly ahead by the Manchurian incident of 1931. There was no let-up in the pressure for expansion in succeeding years, and the demand for more and more domestic machines was intensified before the China incident began. Now the demand has become so great that the Government is taking heroic measures toward still further expansion.

Trend Seen in 1936

In 1936, machinery ranked fourth in value of production, accounting for 14 per cent of the total industrial output. It was preceded by textiles (29.8 per cent of the total), metals (18 per cent) and chemicals (17.2 per cent). It was followed by foodstuffs (10.3 per cent) and others in small amounts, the largest being ceramics (2.7 per cent).

The gains over 1935, however, showed the trend even in 1936—while the "semi-wartime" structure was being set up. Textiles improved 9 per cent and foodstuffs 7.8 per cent, while metals and machinery gained 17.4 per cent, chemicals 16.4 per cent and timber and woodworking 12.7 per cent.

Capacity expansion plans got well under way early in 1937.

The mutual importance of the machinery and tool industry and the military can be seen in the report that the industry got 56 per cent of the Y117,823,000 spent with civil industries by the army in the 1934-35 year. Metals got 20 per cent and civil works (building), the next largest, received less than 8 per cent. The proportion of similar payments likely has not shifted a great deal during the pyramiding of expenditures. Indeed, statements by the Government officials indicate that the military stands ready to buy much more than the industry has yet been able to produce.

Investments Climb

The narrowing of the capital market by the growing Government bonds issues is being partly counteracted in two ways, by forbidding peacetime industries to expand their plants on large scales, even with their own funds, and by lending Government money. The Industrial Bank of Japan receives funds from the Bank of Japan and makes them available to selected manufacturers at low interest through ordinary banks.

During 1937, capital invested in machinery and tool companies (excluding shipbuilding), in setting up new corporations, in raising capitalization and in debentures, amounted to Y476,300,000. In the preceding year, the investment was Y108,100,000, which was almost double the amount in 1935, Y54,900.000. Similar investments in 1932, 1933 and 1934 were Y14,600,000, Y37,700,000 and Y.66,800,000, respectively.

As the investments and production have progressed, the net profit against paid-up capitalization has remained stable. The profits of a section of the industry are shown in the following table :

PROFIT OF 15 LEADING COMPANIES

(Not including shipyards)

(In Y1,000)

	Paid-up Capitalization	*Net Profit*	*Per Cent*
2nd half, 1935	122,726	11,705	9.5
1st half, 1936	129,938	12,596	9.7
2nd half, 1936	142,588	13,542	9.5
1st half, 1937	194,778	*19,865	10.1
2nd half, 1937	159,750	14,421	9.0

* Including exceptional profits of Y5,500,000 in electrical machinery. (Mitsubishi Economic Research Bureau).

Leading machine-tool companies in recent years have concentrated on the production of war requisites. Mitsubishi Heavy Industries has turned to the making of vessels, aircraft and arms, while Hitachi Works has specialized in the making of Diesel-engined automobiles. Gas Denko and Ikegai Iron Works have taken the same step.

It may be conceded that munitions plants cannot be quickly or easily diverted to the manufacture of peace-time products. But the number of plants which will be required to make the shift at the end of the current replenishment program should be small, preparations for another such program to maintain the then attained position of the nation being in prospect. It cannot be said with surety that the total plant capacity will in this decade greatly exceed the demand.

Output Gains

The advance of Japanese machinery and tool production in the past seven years is traced below :

Machinery and Tool Production

(In Y1,000)

Year	*Production*	*Increase Over Preceding year %*	*Index (1931 as 100)*
1931	443,340.7	—	100
1932	543,842.2	23	123
1933	805,115.5	48	182
1934	1,082,072.7	34	244
1935	1,380,558.0	28	311
1936	1,601,000.0	16	361
1937	1,874,000.0	17	423

(Figures for 1931-1935 based upon surveys of Ministry of Commerce and Industry : Others unofficial).

Production by the seven leading machinery makers in Japan during 1937 established a new record, involving a total production value of Y339,000.000, or an increase of 20 per cent over the 1936 production of Y288,700,000. The seven companies include Mitsubishi Heavy Industries, Hitachi Works, Kokusan Industrial (affiliated with Hitachi Works in May, 1937), Shibaura Engineering Works, Niigata Iron Works, Ishikawajima Dockyards and Daido Electrical Steel.

Omitted above because detailed figures are lacking are Ikegai Iron Works, Okuma Iron Works, Gas Denko, Karatsu Iron Works, Fuji Electric Machinery and Mitsubishi Electric Machinery, although they are as large as the seven listed.

In 1932, the seven concerns under review manufactured machine-tools with a combined value of Y75,310,000. In 1933, the production rose to Y98,000,000, and to Y163,900,000 in the following year. The combined output advanced to Y247,800,000 in 1935 and to Y288,700,000 in 1936. The combined production in 1937 is estimated to have amounted to nearly Y340,000,000.

Leaders Progress

The increase since 1934 is especially noteworthy. Of the seven companies, the advances of Mitsubishi Heavy Industries, Hitachi Works and Shibaura Engineering Works were the greatest.

Advance of Seven Leaders

(In Y1,000)

Companies	*1935*	*1936*	*1937*
Ishikawajima	15,422	17,724	23,988
Daido	6,238	6,575	9,254
Hitachi	56,912	68,951	104,412
Kokusan	25,556	26,389	(a)
Shibaura	28,348	35,853	41,383
Niigata	13,342	15,207	25,380
Mitsubishi H.I.	103,001	118,007	134,585
Total	247,819	288,707	339,002

(a) Merged with Hitachi.

In contrast to the sharp increase in the volume of the deliveries of manufactured articles was the expansion of the fixed assets of the major firms, as follows :

* Fixed Assets of Major Machinery Companies

(In Y1,000)

Terms	*Fixed Assets*
1932 1st half	85,380
2nd half	86,164
1933 1st half	83,424
2nd half	86,224
1934 1st half	100,915
2nd half	105,447
1935 1st half	108,619
2nd half	118,031
1936 1st half	119,634
2nd half	126,012
1937 1st half	121,359
2nd half	146,582

* Including Gas Denko, Ikegai Iron Works and Osaka Machinery Works, in addition to the big seven companies.

Fixed assets of the major companies amounted to Y146,582,000 at the end of the second half of 1937, an advance of Y56,200,000 over the corresponding figure, Y85,380,000, at the end of the first half of 1932. Some companies increased their fixed assets, while others reduced them. The fixed assets situation by companies is shown as follows :

Fixed Assets Movement of 10 Firms

(In Y1,000)

Companies	*1932, 1st half*	*1937, 1st half*	*1937, 2nd half*
Ishikawajima	6,829	4,920	5,836
Daido	2,564	4,118	4,506
Hitachi	11,232	30,748	47,708
Kokusan	5,989	(a)	(a)
Gas Denko	12,955	8,519	5,895
Ikegai	3,196	3,312	3,366
Shibaura	13,572	13,091	15,425
Niigata	3,945	4,465	5,208
Mitsubishi H.I.	24,511	49,119	55,000
Osaka Machinery	563	3,057	3,638
Total	85,381	121,359	146,582

(a) Merged with Hitachi.

Ishikawajima Dockyards and Gas Denko had declines, while Mitsubishi Heavy Industries and Hitachi Works showed gains.

Expansion of floating capital was on a large scale, jumping from Y123,310,000 to Y465,000,000 in the past six years, as follows :

Expansion of Floating Capital

(In Y1,000)

Companies	*1932, 1st half*	*1937, 1st half*	*1937, 2nd half*
Ishikawajima	3,904	16,304	22,369
Daido	937	5,278	7,857
Hitachi	10,677	61,570	106,403
Kokusan	9,436	(a)	(a)
Gas Denko	22,802	12,235	17,008
Ikegai	6,985	7,339	11,061
Shibaura	6,392	31,626	49,120
Niigata	2,023	8,010	9.018
Mitsubishi H.I.	64,629	196,513	230,000
Osaka Machinery	531	8,819	11,123
Total	123,316	347,694	464,700

(a) Merged with Hitachi.

The 1937 boom was at least partly the result of an advance in exports. It is noteworthy that Japanese exports of machinery and tools in 1937 was more than seven times greater than in 1931, despite the phenomenal activity to meet the incessantly rising demand at home.

Machinery and tool exports last year were some Y34,000,000 in excess of imports. The exports consisted mostly of large-type and rough machinery and tools, in contrast to the special precision machines which dominated imports.

Imports Double 1931

Exports of machine-tools during 1937 amounted to Y226,900,000 increasing Y47,400,000 or 28 per cent over the 1936 exports of Y177,400,000, and 735 per cent over the 1931 shipments aggregating Y30,800,000. Of the total Japanese export trade for the year amounting to Y3,175,000,000, the shipment of machine-tools occupied 7.1 per cent.

Imports of machine-tools during the year reached Y192,000,000, highest figure since 1929 and twice as high as the 1931 imports. The rate of increase, however, was small when compared with the export gains.

Exports of Machinery and Tools

(In Y1,000)

Year	*Exports*	*Increase over preceding Year %*	*1931 as 100*
1931	30,895.4	—	100
1932	37,699.5	22	122
1933	73,599.7	95	238
1934	132,850.9	81	430
1935	149,758.5	13	485
1936	177,483.5	19	574
1937	226,927.9	28	735

Up to 1935, Japan imported more machine-tools than it exported, the import excess amounting to Y61,151,000 in 1932. Since 1936, the situation has been changed. In 1937, the exports were Y34,230,000 greater than the imports. Exports and imports of machinery and tools are compared as follows:

TRADE IN MACHINERY AND TOOLS

(In Y1,000)

Year	*Exports*	*Imports*	*Import Excess*
1931	30,895	89,906	59,011
1932	37,699	98,650	61,151
1933	73,600	110,444	36,845
1934	132,851	149,376	16,525
1935	149,759	166,033	16,275
1936	177,484	159,878	*17,605
1937	226,927	192,698	*34,230

* Export excess.

Manchoukuo, ultimately expected to be one of the major outlets for the enormous machinery and tool industry being built up, took Y116,099,000 worth of products in three classifications of the industry in 1937. Similar imports from Japan in the previous year amounted to Y81,874,000, reflecting a gain of 70 per cent in 1937.

In classes, the Manchoukuo imports from Japan in 1936 and 1937, respectively, were: machines and tools, Y30,682,000 and Y51,909,000; electrical apparatus, Y16,038,000 and Y25,989,000; and vehicles and vessels, Y35,154,000 and Y38,201,000.

Purpose of Bill Explained

The 73rd Diet adopted Government bills granting privileges to and providing for supervision of the machine-tool and aircraft manufacturing industries.

Under the new laws, the two industries to be exempt from income taxes and business profit taxes for five years. Machine-tools and other materials necessary for the expansion of the two industries are to be free from import duties.

The laws further provide for the grant of special subsidies for the encouragement of the industries. Companies will be allowed to increase capitalization before the full-payment of the capital and to float debentures to an amount twice as large as the paid-up capitalization.

In introducing the machine-tool bill on March 9, the Ministry of Commerce and Industry offered this explanation of its purpose:

"The stabilization of the machine-tool manufacturing industry, which, incidentally, serves as the basis of other industries of the Empire, is urgently necessary in view of the prevailing circumstances at home and abroad for the replenishment of national defense and for promotion of domestic industries.

"For this reason, the Ministry of Commerce and Industry has drafted the Machine-tool Manufacturing Industry Control Law, with the object of providing the necessary protection, assistance, guidance and supervision of machine-tool manufacturing undertakings."

Article 3 of the law provides for the licensing of all machine-tool plants above a limit of size to be specified by the Government. Newly licensed companies are required to begin operations within the period fixed by the Government, or lose their franchises. But the time may be extended in particular cases. Expansions or alterations of production facilities also must receive the prior approval of the Government.

Aid Provided

Positive assistance to be given the machine-tool industry is outlined in articles of the law as translated in condensed form:

Article 7.—Companies newly establishing production facilities or expanding such facilities in excess of the scale as specified by order, shall be exempt from the income tax and the business profit tax for the activities undertaken with the newly erected or expanded facilities. The exemption is effective for five years following the year, or the year following the year, of the completion of the new construction or expansion.

Article 10.—The Government shall supply funds to the companies to bring up the depreciation of the newly established or expanded facilities installed in excess of the scale specified by the Government to reach 60 per cent of the value of the facilities installed, in case the depreciation of the equipment does not reach 60 per cent by the end of the fifth year from the year in which operation begins.

Article 12.—When importing, under Government licensing, necessary machinery, tools and raw materials, companies shall be exempt from import duties for five years from the date of promulgation of the law.

Article 13.—When expanding, companies may increase their capitalizations before their shares are fully paid up, selling new shares to raise funds for installation of new equipment.

(Under the Commercial Code, companies are not allowed to increase capitalization before outstanding shares are fully paid up).

Article 14.—Companies may, with Government permission, float debentures over the limit fixed by the Commercial Code in order to raise funds for new plant. Total value of such debentures may not exceed an amount twice as large as the value of the total paid-up shares.

Losses to be Compensated

Article 21.—The Government, in accordance with the provisions of the Imperial Ordinance concerned, shall compensate for losses caused by instructions in connection with adjustment of supply and demand or for filling special orders for the military.

Article 22.—Subsidies may be granted to companies making test production of machine-tools specified by the Government.

Article 23.—When imports of machine-tools should threaten the stabilization of the domestic machine-tool industry, the Government may restrict the imports of machine-tools within a fixed period.

Among the 34 articles of the law, these are some of the principal ones concerning control of the industry:

Article 15.—When transferring part or all of their enterprises, or abolishing or suspending them, companies must obtain Government licenses. Merger or liquidation of machine-tool manufacturing companies shall not take effect without Government permission.

Article 16.—Licensed companies shall draft industrial plans and report them to the Government. Alterations of such plans also must be reported. When deeming it necessary, the Government may order the alteration of such industrial plans.

Article 19.—The Government, when deeming it necessary for the public interest, may order machine-tool manufacturing companies to change sales prices or sales conditions of machine-tools, or may order action necessary for the adjustment of the supply and demand of machine-tools. The Government also may order companies to expand or improve their production facilities.

Article 20.—The Government, when deeming it necessary from the military standpoint, may order machine-tool manufacturing companies to make special studies of specific items relating to the manufacturing of specified machine-tools, to set up special equipment for the same purpose, or to take other actions necessary from the military standpoint.

Aviation Sufficiency is Aim

The bill for control of the aircraft manufacturing industry was submitted, also on March 9, by the Ministry of Communications. The Ministry's purpose is to develop the industry to the point where it can meet both private and military requirements.

Manufacture of airplanes in whole or bodies, engines or propellers, is to be licensed. Provisions for beginning operations, reporting industrial plans and exemption from income and business profit taxes are similar to those of the law concerning machine-tool companies.

Free import of machines and materials on approved orders also is provided. Subsidies are authorized for companies manufacturing airplanes or parts not heretofore produced in Japan. Provisions for capitalization increases and debenture issues also are similar to those made for the machine-tool concerns.

The Government is authorized to control sales prices and sales conditions and to issue orders for adjustment of supply and demand of aircraft and parts. The article giving this authority is conditioned on "necessity from the standpoint of the public interest."

In the succeeding articles, the Government is empowered, when deeming it necessary from the military standpoint, to order aircraft makers to take the following action:

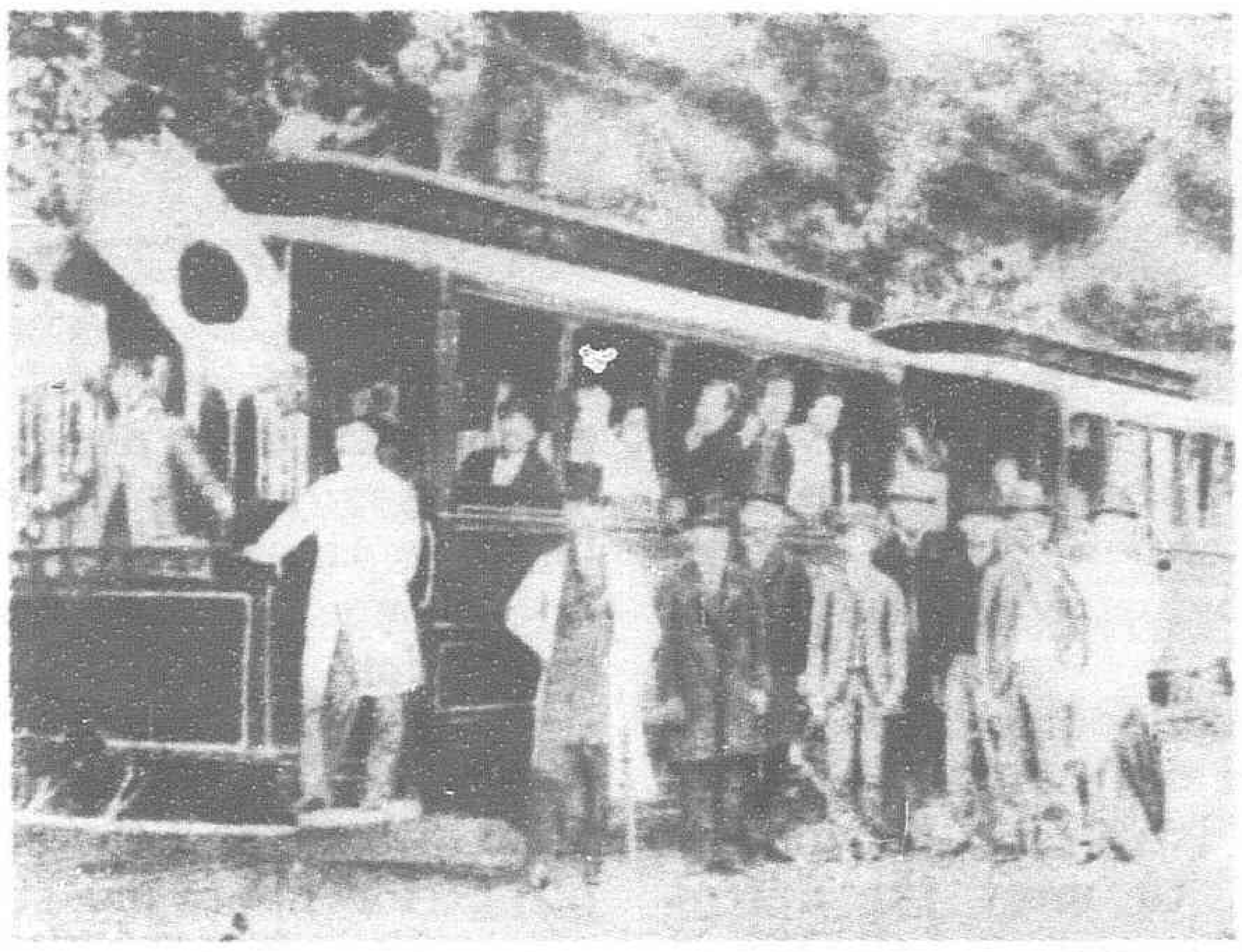
(1) Expand or improve production facilities.
(2) Produce airplanes, bodies, engines or propellers specified by the Government.
(3) Make studies relating to the aircraft or establish special facilities.
(4) Train technical experts for the manufacture of airplanes, bodies, engines and propellers.

Electricity in Japan

The study of electricity in Japan dates back to the closing period of the Tokugawa Shogunate (1600-1867), when the Dutch language was introduced for the first time into the culture of the Empire. Through that language, Japanese pioneers studied the principles of natural science and worked untiringly to apply their knowledge to practical life.

Gennai Hiraga (1779-1782), a student of the Dutch language and science, was the pioneer in the study of electricity. As early as 1776 he built an electrical machine in Edo, as Tokyo was then named, modelled after a similar machine he had seen in a Dutch shop at Nagasaki, which was then the trading port of the country. Later, Donsai Hashimoto advanced the theory that the whole universe is kept in order by means of electricity. He published two volumes entitled "Study of Electricity," which, however, were suppressed in 1813 on the charge that it was a fabulous story. But he is remembered as the pioneer in electrical science in Japan.

Shozan Sakuma, a patriot and another early student of foreign science, studied Oriental philosophy and Occidental natural science. In 1884 he made silk-covered copper wires and an electric battery of his own, and designed a sort of electro-magnetic machine; and later designed an electric therapeutic instrument, which, with a piece of his copper wire, is preserved in the Museum of the Communications Ministry. These are valuable relics of the earlier endeavors in the science of electricity.



Electric street car in Kyoto, first used in 1895

Thanks to these distinguished pioneers, the Japanese people were enlightened as to the mysteries of electricity, and their interest in this science has grown suddenly with the cultural development since the Meiji Restoration. Nevertheless, electricity was not used for illumination for a long time.

The first telephone conversation was held in Japan on March 25, 1878, when the Tokyo Central Telegraph Office was opened for business, between that office and the Tokyo University of Engineering. On the same occasion, the students of the university, under the instruction of Professor W. R. Ayrton, brought out an electric battery and lighted arc lamps in the university hall where the opening was being celebrated. It was thus that the astonished Japanese first listened to electric sounds and saw electric light. This day has since been remembered as Electric Day in Japan, and is commemorated each year with public meetings and entertainments.

Development of the Electric Power

Japan's electric power and light industry dates from November, 1887, when the Tokyo Electric Light Company began serving 75 incandescent lamps, using a home-made generator. This first commercial station was at Nihonbashi, Tokyo.

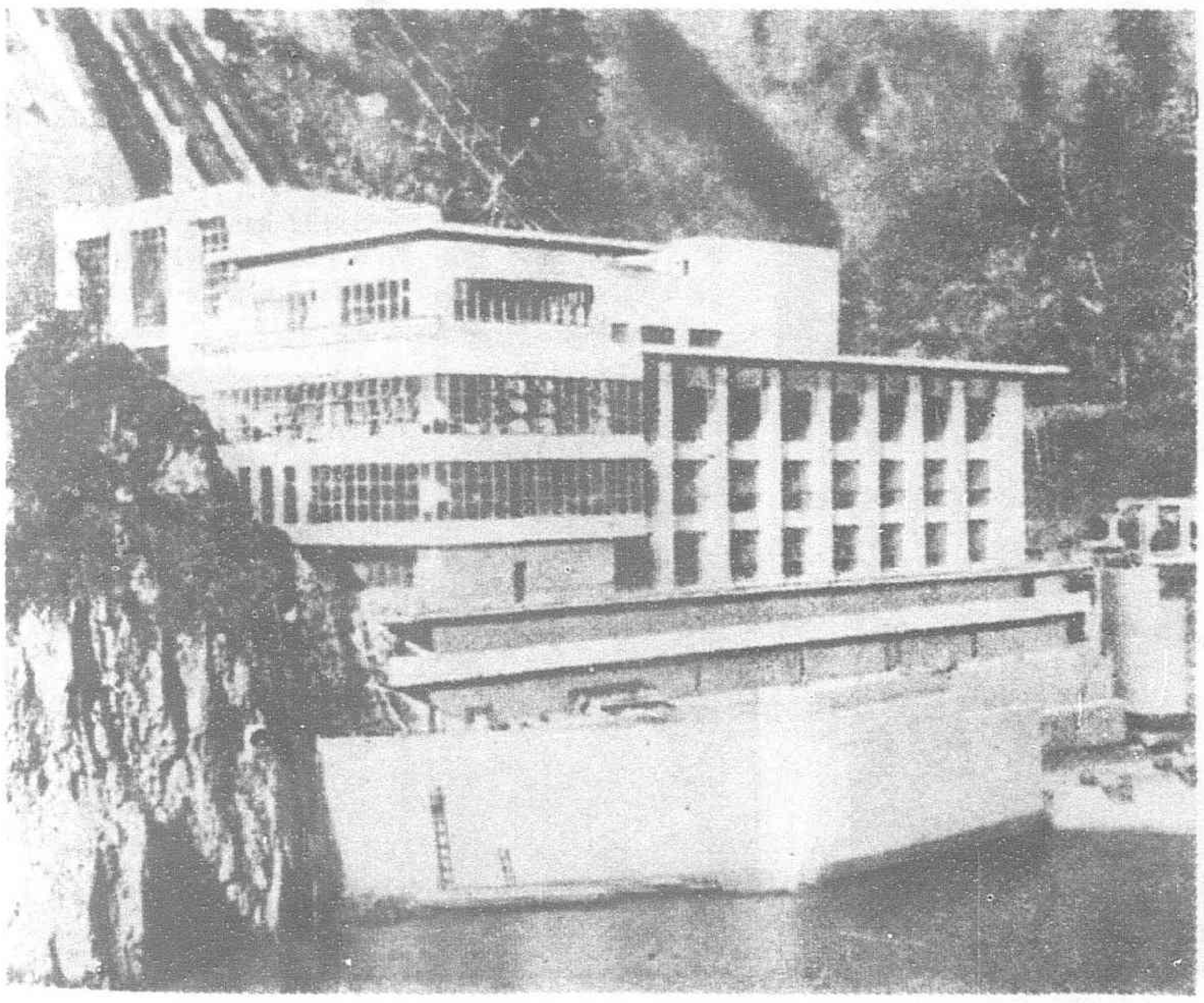
Three more generating stations were constructed by the same company in 1888, and in September of that year the Kobe Electric Light Company was formed. The following year the Osaka Electric Light Company was incorporated, and later Kyoto, Nagoya and Yokohama were also supplied with electricity.

By the end of 1890 the generating capacity of public utility companies in Japan was about 1,500 kw. including two 80-kw. generators installed in Kyoto in connection with the construction of the Lake Biwa Canal. The first hydro-electric plant in Japan, these two generators, were placed in service in May, 1890.

Kyoto was the first city to have electric street-cars. Using the overhead trolley system, the Kyoto Electric Railway Company opened its line to traffic in February, 1895. The Nagoya Electric Railway Company and others followed in quick succession in 1898 and after.

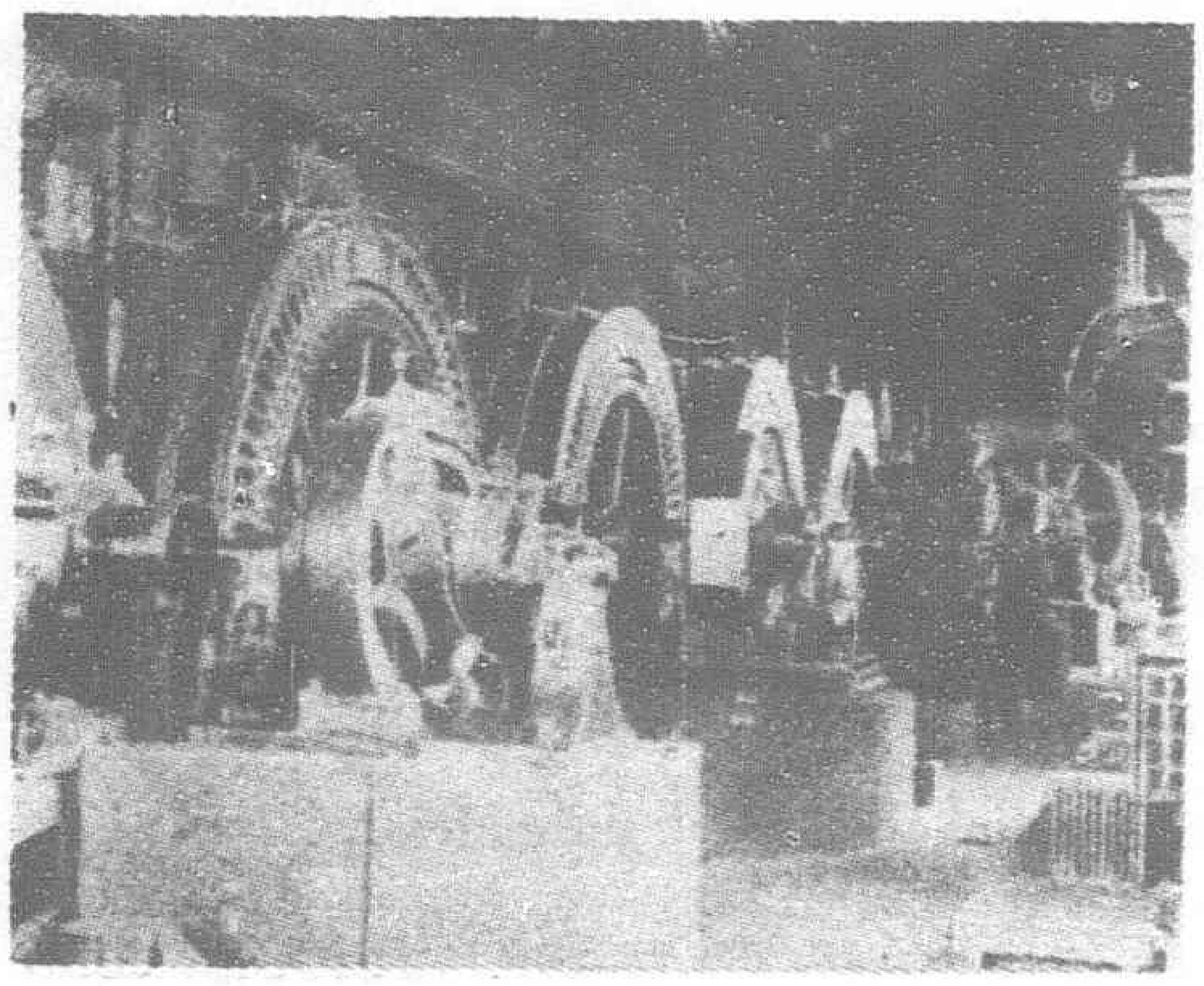
Power generation and transmission was gradually expanded in scale. Beginning with the success of the Koriyama Silk Spinning Company, Fukushima, in transmitting 10,000 volts over a distance of 15 miles in 1899, long-distance high-tension transmission has featured subsequent projects. In 1907, a project to transmit 55,000-volts from a 15,000 kw. hydraulic plant at Komabashi, on the Katsura river, to the capital was successfully completed by the Tokyo Electric Light Company.

The industrial activity following the Russo-Japanese war (1904-05) stimulated the electric power industry tremendously. The generating capacity by the end of 1907 had risen to 110,000

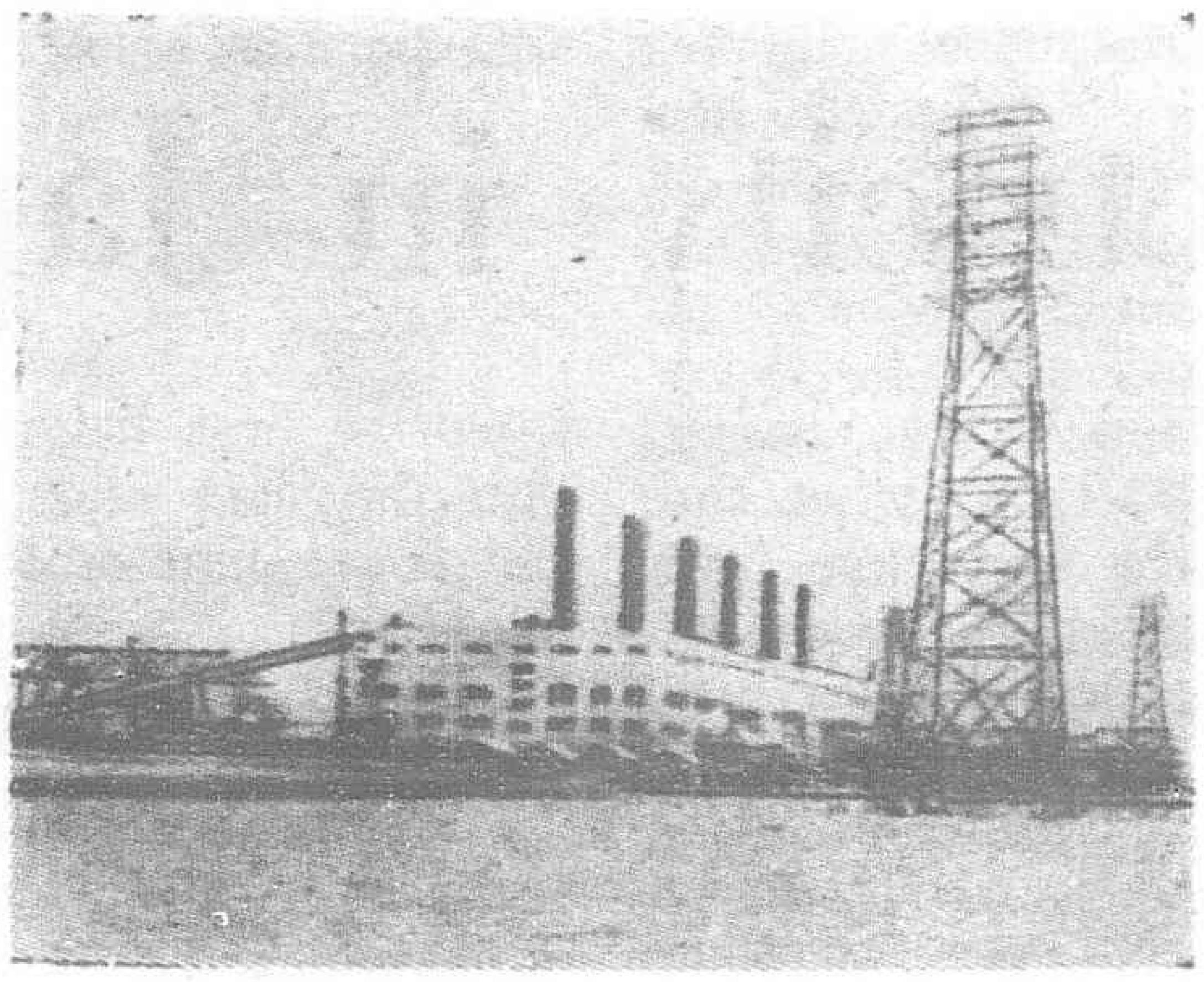


Kurobegawa No. 2 hydro-electric plant of the Nippon Denryoku Company. Total output 65,200 kw.

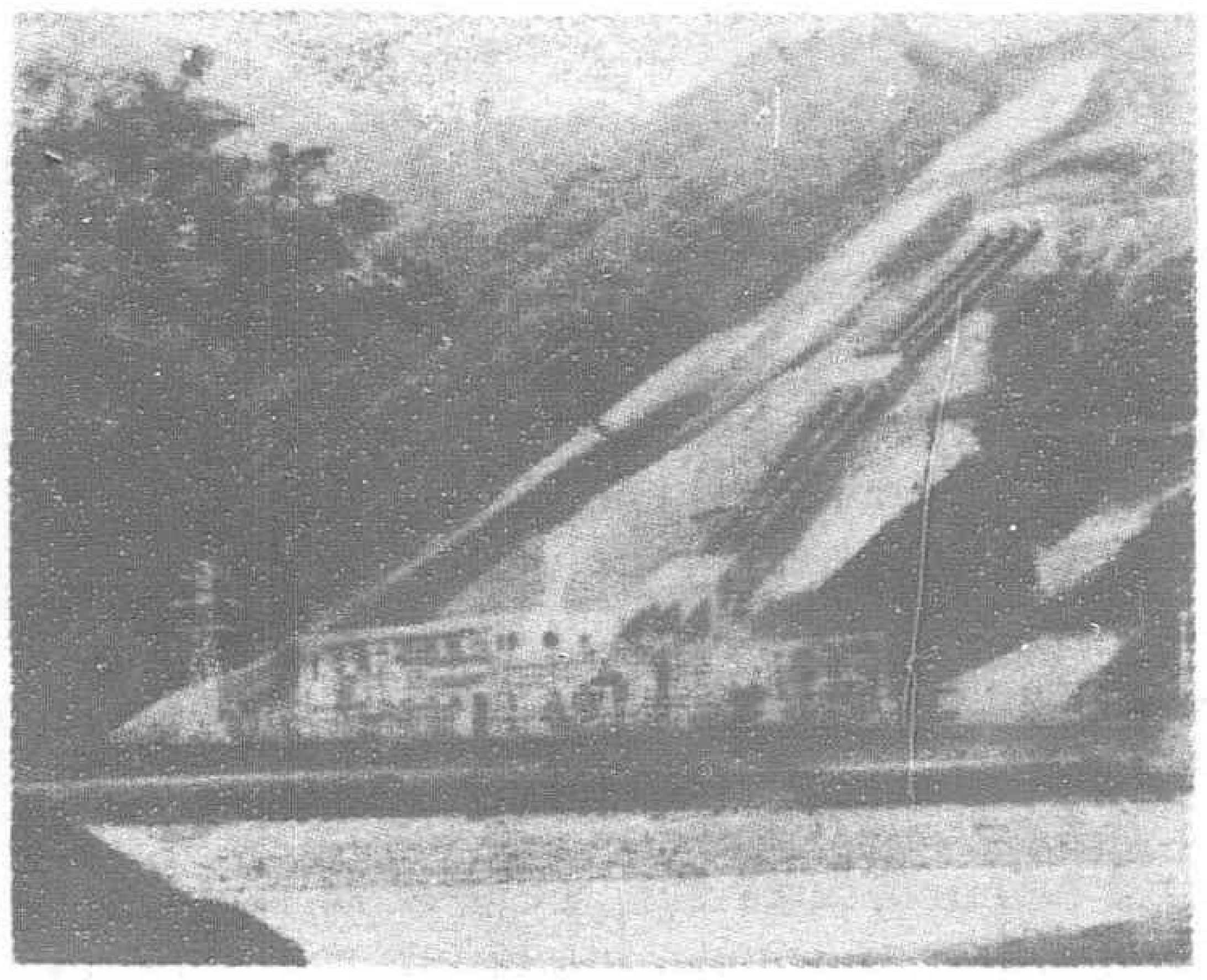
Dam for Fusenko No. 1 hydro-electric plant of the Chosen Chisso Hiryo Company. Total output 129,600 kw.



Installation of four 200 kw. A.C. single phase generators at Asakusa Power Station by the Tokyo Dento Company in 1895



Kyodo Karyoku Amagasaki steam power plant of the Kansai Kyodo Karyoku Hatsuden Company. Total output 318,000 kw.



Oigawa hydro-electric plant of the Oigawa Denryoku Company. Total output 62,200 kw.

kw. from the total of 44,000 kw. at the end of 1903, and 780,000 lamps and 8,000 kw. of motors had been connected.

Steam power predominated in those days. At the end of 1903 a total of 31,000 kw. was produced by steam plants against 13,000 kw. by water wheels.

Recognition of the economic importance of hydro-electric power led to the organization of the Government water power survey in 1910 under the direction of the Communications Minister. Its three years' investigation of the potential water power of the country did much to promote the hydro-electric industry in the years following.

Water power outstripped steam power as a source of electricity during 1912, and from that year the rapid development of large water power sites and the introduction of large-scale generation, backed by enormous amounts of capital, to meet the urgent demand for electricity in the boom years during and after the World War brought about a new era in the industry. At the end of 1919 the total generating capacity was 1,100,000 kw., consisting of about 700,000 kw. of hydraulic and about 400,000 kw. of thermal power plants.

It was found, however, that the minimum flow estimated by the Government Water Power Surveyors at a limited number of preferred sites was not the most economical basis, and the adoption of a greater flow as the basis of water power development was the tendency of engineers in those days.

Consequently, the survey was repeated between 1918 and 1922 to ascertain the hydro-electric power available for industrial purposes from the standpoint of economic utilization of water power resources.

This second survey revealed that the water power available at 2,822 sites was sufficient to produce 4,786,000 kw. on the basis of the minimum flow, and 10,051,000 kw. at the maximum flow, based on the flow for six months. The annual average was 8,902,000 kw.

Outstanding Stations

These large, preferred sites have been developed one by one, with 200 to 400 km. transmission lines leading to the load centers. Outstanding among them are the stations of the Daido Electric Power Company on the Kiso, the so-called Japan Rhine, and the Tenryu, those of the Nippon Electric Power Company on the Kurobe and other rivers in the Hokuriku district, those of the Showa Electric Power Company on the Sho, and those of the Tokyo Electric Light Company in the Koshin, Joetsu and Aizu districts and on the Agano. Completion of the 154 kv. transmission lines not only made possible the overhead transmission of power to Tokyo, Yokohama, Nagoya, Kyoto, Osaka and Kobe from out-of-the-way places, but also the inter-connection of plants, which made possible an interchange of power and attainment of greater economy in power generation.

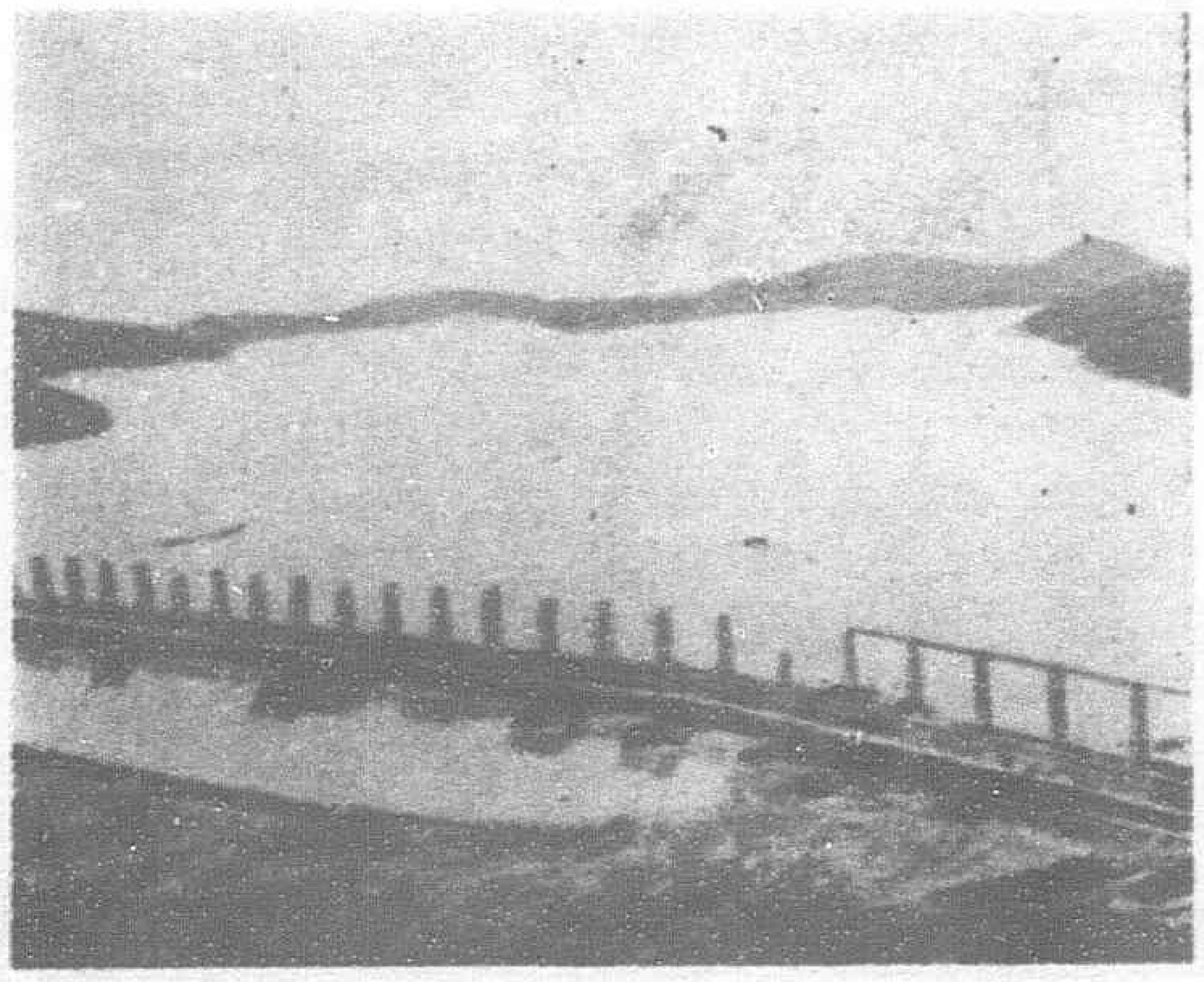
Progress in machinery and the lower price of coal have made thermal plants much more economical than at the beginning of their history, and the construction of large steam plants as reserve plants for hydraulic stations with water reservoirs appeared in succession. The recent practice is to harness water power on the basis of six months' flow.

While the number of electric power undertakings for public service has increased with the growth of the industry, the trend has been toward centralization of ownership and control. Mergers and consolidations were resorted to by so many power companies that a reduction in the number of the electric power undertakings was observed until the revision of the Electric Power Undertaking Law in December, 1932, raised the former private power plants to the status of power supply undertakings.

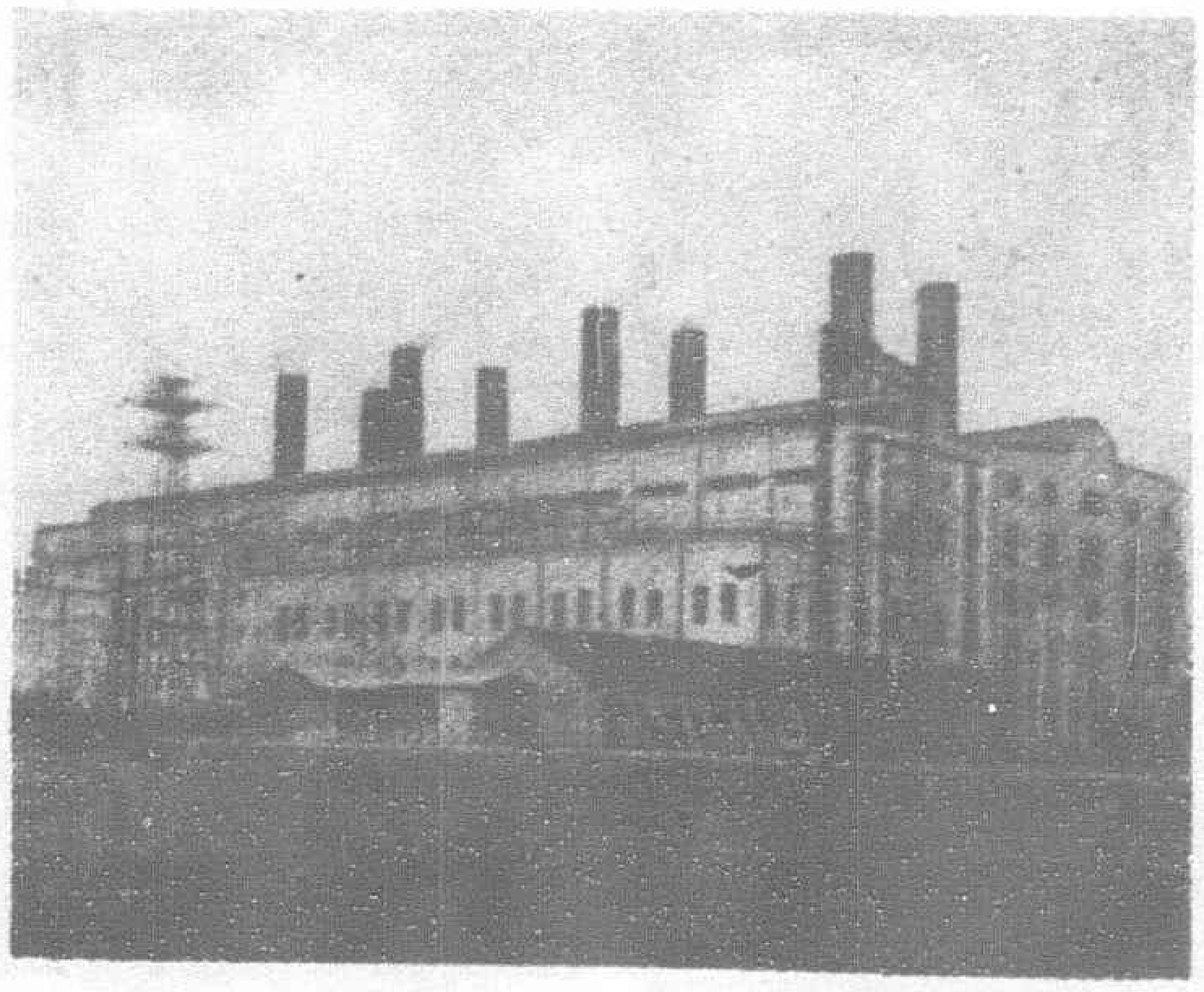
Power plants for the exclusive use of the industrial owners have also steadily increased in number. At the end of 1936 their total capacity was estimated at 983,450 kw., of which water power supplied 107,787 kw. and thermal or other power 875,663 kw. Thus, in 1936, the total capacity in the country for both public service and private use was 3,759,334 kw. by water power and 2,924,778 kw. by thermal power and others (Government railway plants, which are excluded, amounted to 88,600 kw.).

Electric railway lines have gradually spread, and their length at the end of 1925, 1930, 1936 are as follows, respectively :

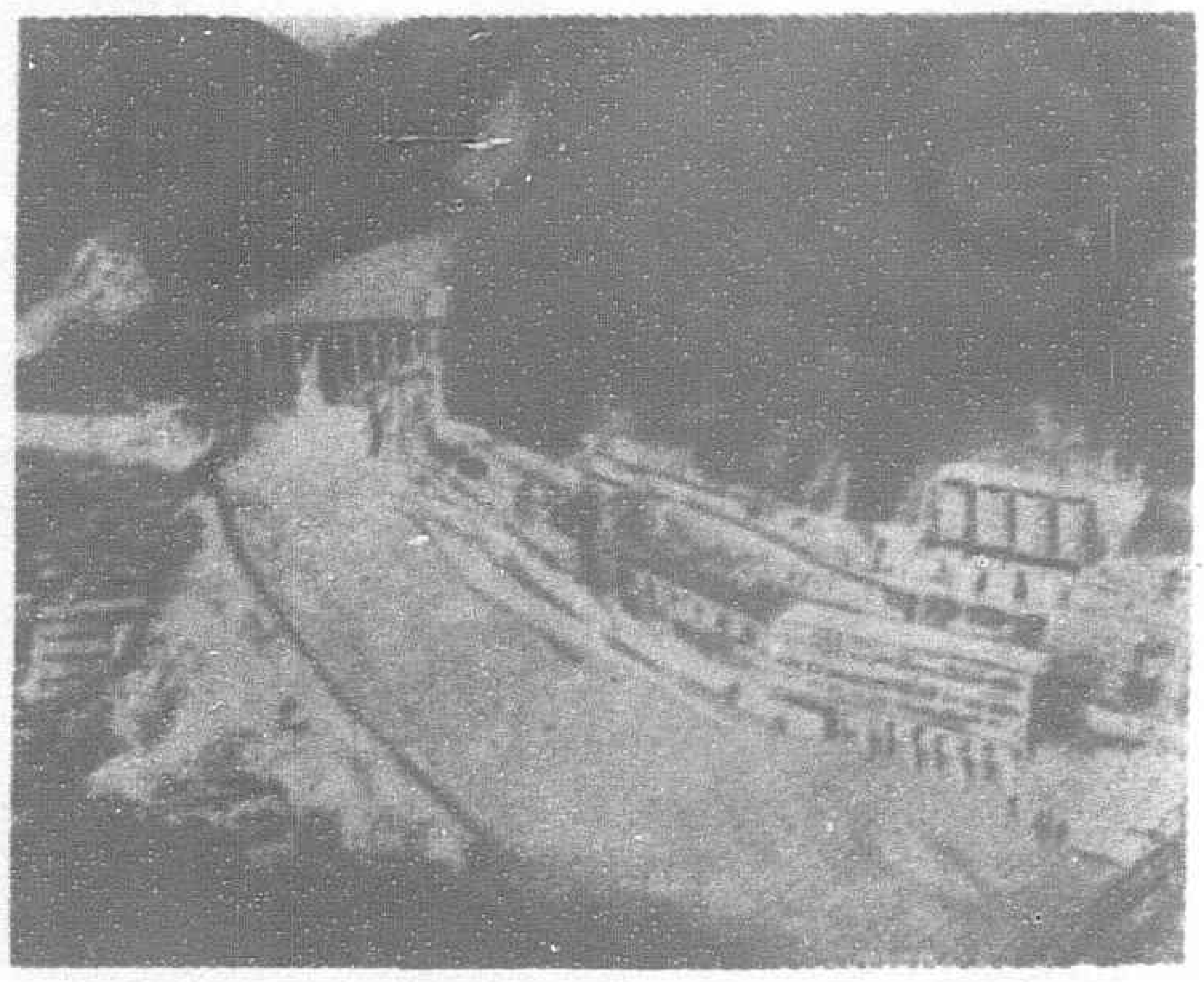
1925	2,922 km.
1930	5,740 km.
1936	5,977 km.



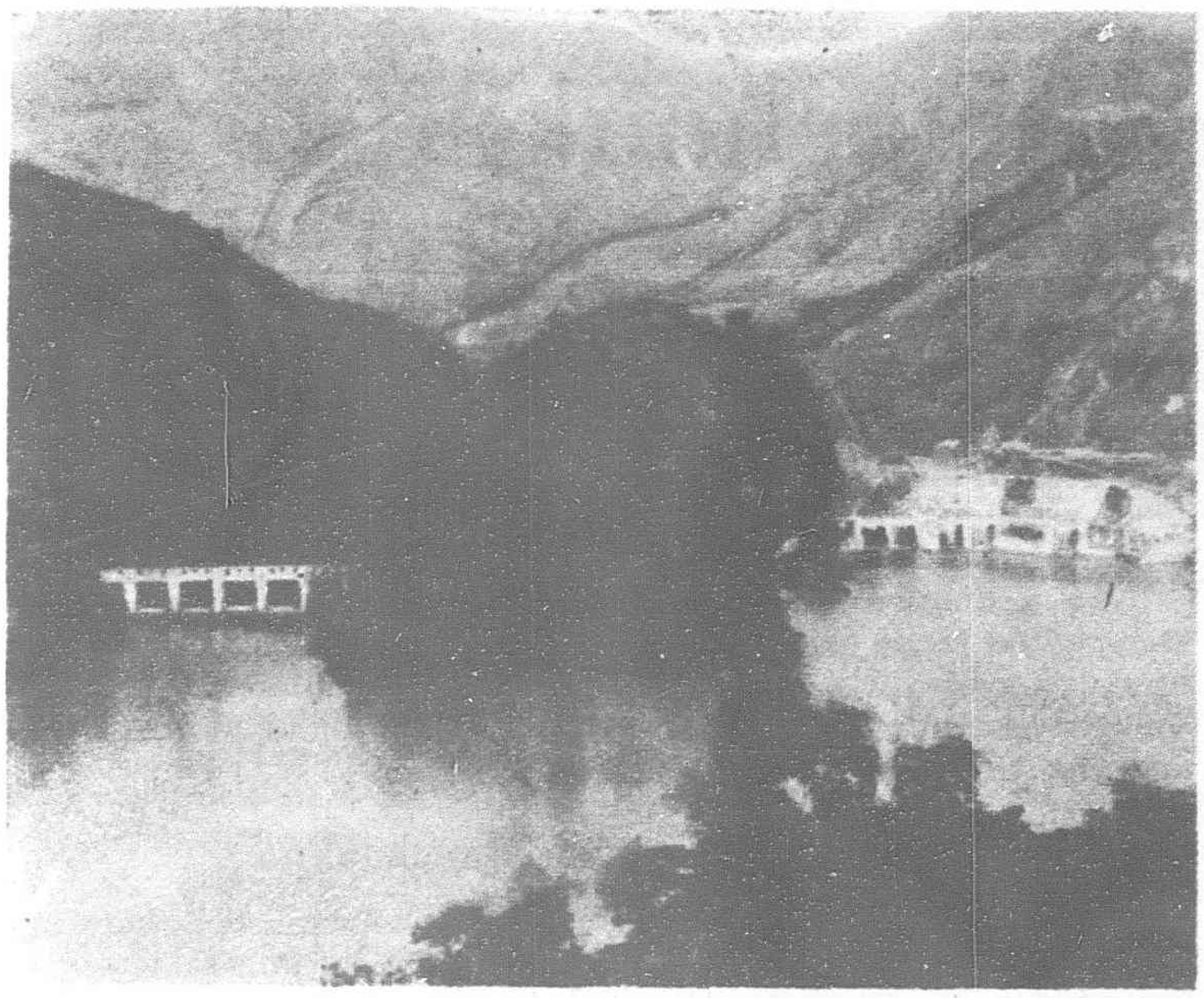
Dam on the River Choshinku, Korea. Total generating capacity 325,000 kw.



Amagasaki steam power plant of the Nippon Denryoku Company. Total output 140,000 kw.



Yasuoka hydro-electric plant of the Yahagi Suiryoku Company. Total output 52,500 kw.



Nichigetsutan No. 1 hydro-electric plant of the Taiwan Denryoku Company. Total output 100,000 kw.

In addition to the above, the rapid electrification of the Government Railways was also remarkable.

1925	180 km.
1930	235 km.
1936	611 km.

The total investment in electric light and power supply and electric traction (excluding the Government railways) surpassed Y6,451,838,000 at the end of 1936, the earnings of the business as a whole being quite satisfactory.

The constant increase in the demand and the improvement of equipment, mutually stimulating, have played an important part in the betterment of the public service offered by the electric power companies and are promoting the culture of the nation as a whole.

Telegraph, Telephone and Radio

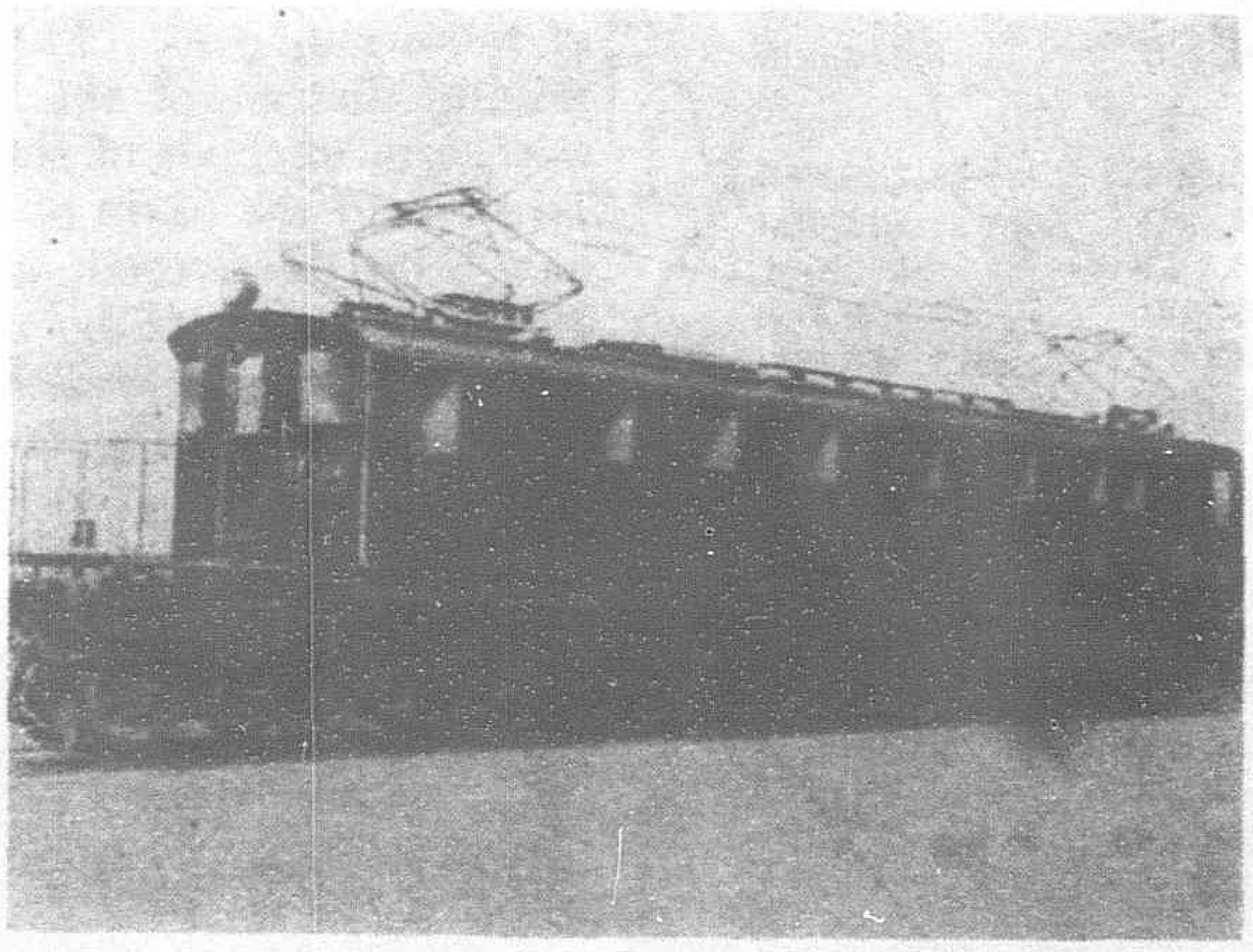
The telegraph and telephone business in Japan is exclusively a Government undertaking, its activities coming under the control of the Ministry of Communications.

First experiments in telegraphy were made in Yokohama, in August, 1869, and in the following December a public telegraph service between Tokyo and Yokohama was inaugurated. During the succeeding 60 years, the service has been extended throughout the breadth and length of the Japanese Empire, and by the end of 1935, the government was operating on land 234,090 km. of bare aerial wires, aerial cables totalling 23,621 km., 100,769 km. of underground cables and 18,544 km. of submarine cables, or a total of 377,042 km. for the complete telegraphic network of the country.

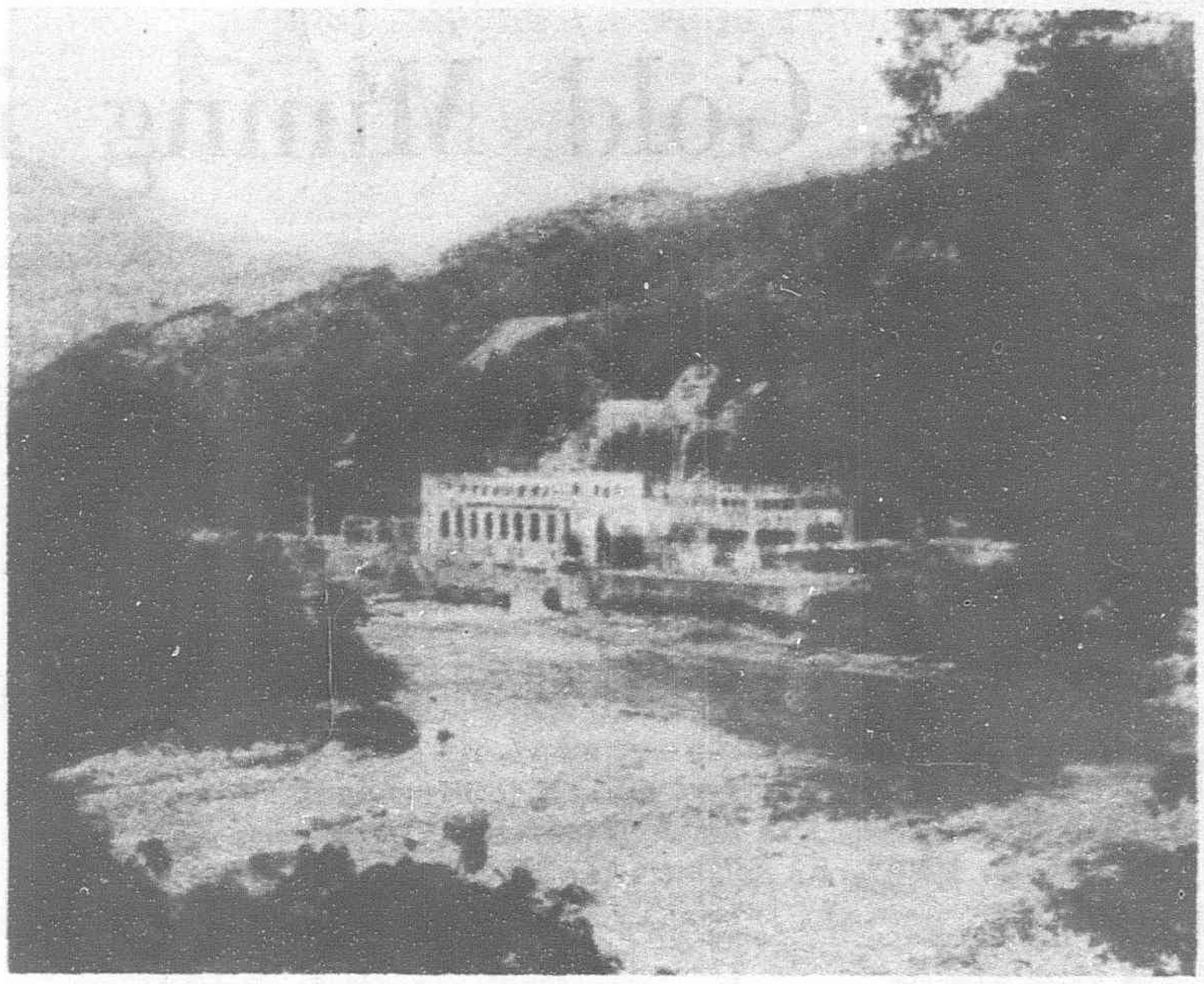
A comparative list of the number of telegraphic messages handled in the past ten years follows:

Year	Outgoing			No. of Messages Per 100 Population	No. of Telegraph Offices	No. of Wireless Telegraph Offices
	Domestic	Foreign	Total			
1926 ..	66,150,109	1,279,937	67,430,306	112.9	6,335	674
1930 ..	57,382,506	1,183,861	58,566,367	90.2	6,855	776
1935 ..	65,578,933	1,456,606	67,035,539	92.3	8,214	765

The telephone was in use as early as 1877 between Government Offices and railway stations. The first public service was inaugurated in 1890 in Tokyo and Yokohama, although the subscribers numbered only 175 in Tokyo and 45 in Yokohama. Services were later opened in Kobe and Osaka, and have now been extended to all parts of the country.



4-6-6-4 type electric locomotive for the Japanese government railways



Komaki hydro-electric plant of the Shokawa Suiryoku Denki Company. Total output 72,000 kw.

At the end of 1935 there were 7,729 telephone offices, 3,627 public telephone booths, and telephone lines totalling 6,737,329 km., serving 870,476 subscribers.

TELEPHONE SUBSCRIBERS

Year	Individual Subscribers	Party Subscription	Subscription for Indirect Telephone Connection	Total
1926	538,764	9,690	4,103	552,557
1930	698,199	13,286	3,535	715,020
1935	851,620	15,844	3,012	870,476

NUMBER OF TELEPHONE CALLS

Year	Total Number of Calls	Calls Per 10,000 Population	Calls Per Subscriber	Telephone Offices	Public Booths
1926 ..	2,321,030,251	92.49	4,201	4,671	1,724
1930 ..	3,194,339,931	110.94	4,467	5,847	2,225
1935 ..	4,302,848,221	125.69	4,943	7,949	3,627

The international telephone service, which has of late been rising in importance, connects local stations by means of wire and wireless systems with stations in England, Germany and other European countries, the United States, Brazil, the Philippines, the Dutch East Indies, British India, Africa and various key points in China.

Radio Broadcasting

About 1922 the Communications Ministry started to investigate radio broadcasting, and laws were promulgated, providing that the enterprise might be placed in the hands of a public utility corporation. In 1924, a broadcasting station was established in Tokyo.

In March of the following year it did the first broadcasting in Japan. Other stations were opened in Nagoya, Osaka and other leading cities. In the earlier years, all the stations had poor facilities, with antenna capacity not exceeding one kilowatt in any case. Each broadcast its own program, with no arrangements for relaying.

In August, 1926, in view of the nature of broadcasting as a public enterprise, three broadcasting organizations were merged into the Japan Broadcasting Association, which was authorized to monopolize the industry. The new corporation devoted itself to completing a broadcasting network and improving relaying arrangements.

(Continued on page 41)

Gold Mining in Manchoukuo

(Contemporary Manchuria)

At the present day when many countries have come to adopt a common currency policy of dropping the gold standard, the function of gold as a medium of internal payments has become completely limited. Its importance, however, as the basis of international payments is still supreme. There has recently been a rising tendency in the demand for gold owing to the anticipated devaluation of currency on the part of various countries especially in the future, and to the increase in gold hoards resulting from growing uneasiness over possible wars. A review of gold production in various countries indicates that there has been an increase in output yearly since 1930. The following comparative table on the 1935 and 1936 productions, investigated by the *Engineering Mining Journal*, shows a 13.5 per cent gain in the world's 1936 gold output over the previous year.

Countries	*1935*	*1936*
North America	*(in fine ounces)*	
United States	3,115,514	3,713,000
Canada	3,280,457	3,738,000
Nexico	682,257	782,000
Newfoundland	12,000	12,000
Total	7,090,228	8,245,000
Central America	150,000	170,000
South America	1,321,000	1,500,000
Europe		
Russia, including Siberia ..	5,831,106	7,289,000
Other countries	771,000	850,000
Total	6,602,106	8,139,000
Asia		
India	324,816	330,000
Dutch East Indies	63,000	65,000
Japan, including Chosen ..	871,000	958,000
Philippines	430,655	600,000
China and other countries ..	343,000	383,000
Total	2,032,471	2,336,000
Oceania		
Australia	890,214	1,099,000
Fiji Island	2,000	3,000
Tasmania	8,342	9,000
New Guinea	275,000	315,000
Papua	7,000	9,000
New Zealand	168,312	183,000
Total	1,350,868	1,618,000
Africa		
Transvaal	10,776,684	11,339,000
Rhodesia	728,280	803,000
West Africa	395,743	523,000
Congo and Egypt	833,300	858,000
Total	12,734,007	13,523,000
Total world production ..	31,280,680	35,531,000
Value of total world production (estimating 1 oz. at $35) ..	$1,094,824,000	$1,243,585,000

In view of the above trend in the currency and gold production policies of different countries, it is natural that the state of Manchoukuo, which is inseparably linked with Japan economically, should, as a common national policy, be greatly interested in increasing domestic gold production. Its efforts to boost the output of this valuable metal are, moreover, spurred on because Japan's gold mines have already been practically exploited and it is now difficult to expect any great increase in production in the future.

Although North Manchuria has long been known as the largest gold producing district in the Far East together with the Soviet territory along the Amur River, no opportunity has hitherto been afforded for making larger investments in gold mining in that part of Manchuria owing to the disturbance of peace and order, poor transportation facilities and other obstacles, and gold mining enterprises were conducted on an extremely small scale with crude technique and with no adequate control exercised over them.

At a time when expectations at home and abroad on the unexploited virgin gold fields of Manchuria have become increasingly keen day by day, the writer considers it of great interest to recollect the results of the gold mining industry in Manchoukuo in the past and also to forecast the future of the industry.

Gold Resources of Manchoukuo

Together with agricultural products mineral deposits constitute the main resources of Manchoukuo. Of the mineral resources importance is especially attached to the placer (alluvial) gold deposits in North Manchuria and to mountain gold in South Manchuria. These deposits are found in almost all parts of the country, it being said that of the total area of 1,300,000 square kilometers, 1,000,000 square kilometers are gold bearing districts. In his *The Mineral Industry of the Far East*, the Russian geologist, Mr. B. P. Torgasheff, viewing the North Manchuria gold deposits from a geological standpoint, states:

In North Manchuria gold is chiefly found in the younger alluvial stratum. The river placer deposits which are being mined, and traces of gold belong to this stratum. The older alluvial gold bearing stratum is also found in all parts of North Manchuria and forms the source of rich gold mines. Although there are practically no geological reports, it is believed that gneiss and granite exposed on the surface of the earth due to erosion caused by the innumerable tributaries and streams of the Sungari, Amur, Argun and Ussuri rivers, contain gold. Especially Jurassic conglomerates are widely distributed in North Manchuria and ever since they were discovered by the Russian engineering expert, Baron Aminoff, invariably to contain gold, new interest has been evoked. . . .

It is known that in North Manchuria, at least three districts (where quartz, which has economic value, is found), contain deposits of mountain gold. They are namely the Barga region within the mining district of the Upper Amur Gold Mining Company,* the northern, offshoot of the Great Hsingan Mountains near the Argun River, and the basin of the Muleng River. The last named district has been discovered, as a result of investigations conducted by Baron Aminoff, to be most suited for starting gold mining enterprises on a large scale.

Although the general distribution of gold deposits in North Manchuria may be understood from the foregoing passage, further explanations will be added.

In olden times placer gold was mined in the former Heilungkiang Province centring about Taheiho (Heiho), the Great Hsingan Mountains in the upper reaches of the Amur, and the regions around the Small Hsingan Mountains in the lower reaches of the same river. These districts have been known among the Manchus and Chinese as "Gold Country" ever since placer gold was discovered there back in 1862. Total gold production in the above districts since 1875 up to recent times is

Experts studying samples of mountain gold mined in the Hsingan Mountains

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*The Upper Amur Gold Mining Company was one of the five Russian gold mining companies which acquired mining rights in Manchuria by virtue of the Russo-Chinese Agreement of 1901.

estimated to reach the huge value of 110,000,000 yuan, an amount unrivalled in any other part of China.

Large amounts of placer gold have also been produced in the north-eastern districts of the former Kirin Province (which adjoined the former Heilungkiang Province on the east), namely the lower reaches of the Sungari and Mutan rivers, and the upper reaches of the Muleng and Hsiaosuifen rivers, placer gold being especially abundant in Ilanhsien, Huachuan-hsien, Mishan-hsien and Muleng-hsien. The Chientao district in the Tumen river basin is also a promising placer and mountain gold producing region and there are still many mines under operation. In the vicinity of the Chiapikou Gold Mine in Huatien-hsien, where placer mining had been actively carried on from olden times, outcrops of mountain gold deposits have been discovered recently, brightening the expectations that it may again become an important gold producing district. Considering the fact that much placer gold has hitherto been produced in districts north of the former North Manchuria Railway on the whole, and that mountain gold is found south of the same railway and is also produced in considerable amount in the adjoining North Chosen districts, it is nothing strange in deducing that mountain gold is produced in the districts around the Chiapikou Gold Mine. The total gold deposits in Manchuria are unknown, but Mr. Torgasheff has the following to say in *The Mineral Industry of the Far East*.

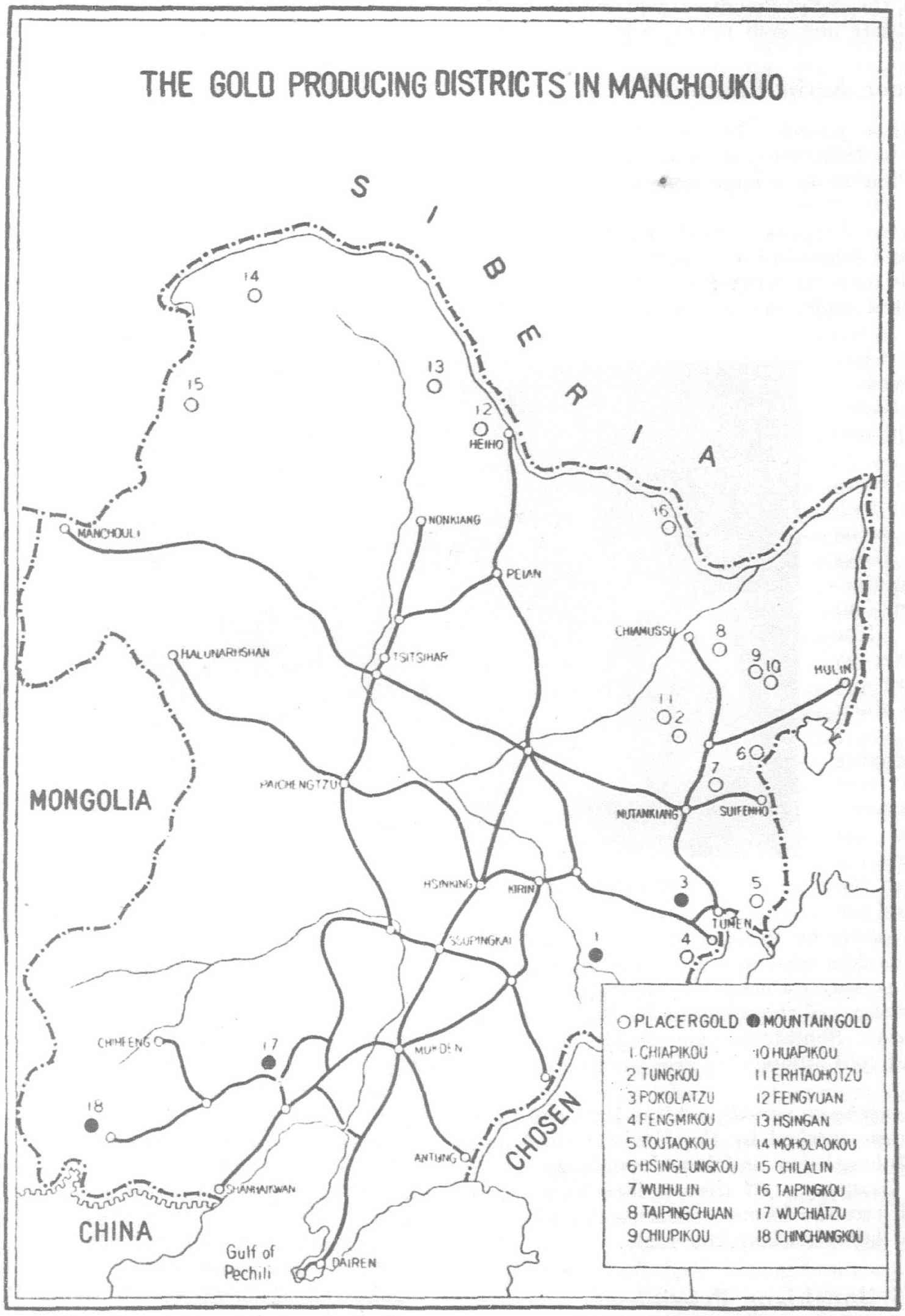
As North Manchuria has not been fully surveyed geologically, it is still too early to give definite statistics on the amount of its gold deposits, but judging from materials obtainable, there is no doubt that the total deposits throughout Manchuria are very large. According to an investigation made by Dr. E. E. Ahnert, the Russian geologist and explorer of Manchuria, who employed the same method applied in estimating the gold deposits in the Russian Far East, the total gold deposits in North Manchuria are placed at over 3,500,000 kilogrammes.

For the purpose of reference gold production in North Manchuria in recent years, according to investigations conducted by the S.M.R. Geological Institute, is given below. The Manchurian Incident broke out in 1931 and as gold mining is reported to have been at an almost complete standstill since then, the figures for 1931 are not definite. The conditions following the revival of the industry as a result of the enforcement of the Five-Year Industrial Development Plan will be mentioned later.

GOLD PRODUCTION IN NORTH MANCHURIA

(grammes)

Year	*Kirin Province*	*Heilungkiang Province*	*Hsingan Province*	*Total*
1926	35,850	1,225,950	412,500	1,674,300
1927	37,500	822,862	477,000	1,337,362
1928	37,500	586,875	375,000	999,375
1929	225,000	187,500	112,500	525,000
1930	412,500	652,500	412,500	1,477,500
1931	412,500	443,062	265,312	1,120,874
Total	1,160,850	3,918,749	2,054,812	7,134,411
Average annual production ..	193,475	653,125	342,468	1,189,068


THE GOLD PRODUCING DISTRICTS IN MANCHOUKUO

Development of Gold Mining

In reviewing the history of gold mining in Manchuria, it is noted that gold was produced at Fuyu, Kirin Province, in the Sungari river basin as far back as 1,400 years ago, in the latter part of the Koguryu era. There are also records showing that gold was mined and refined in the eastern part of Kirin Province during the Tang and Sung dynasties which came after the downfall of Koguryu. These records, however, are not always reliable. Under the Ching dynasty the natural development of Manchuria was impeded owing to the transfer of the capital to Peking* and the adoption of a closed-door policy which prevented the migration of Chinese into Manchuria, and gold mining was entirely suspended for a time. When Czarist Russia began encroaching southward upon Manchuria, the Ching dynasty, in order to counter the growing Russian influence, dispatched troops to Manchuria and also permitted the emigration of many Chinese to that country. Parallel with these developments transportation facilities were improved, finally paving the way for the development of Manchuria. The number of Russians planning to engage in gold mining in Manchuria rapidly increased when Russia acquired mining rights in North Manchuria by virtue of agreements concluded with the Ching dynasty in 1901 and 1902. These factors created an era of gold rush in Manchuria. An interesting story is told on the advancement of Russians into the Manchurian gold mining field. The story runs that about 1880 a Russian explorer whose attention had early been attracted by the gold mines in Manchuria discovered rich deposits of placer gold in the basin of the Jeltuga River, a tributary of the Amur, and became a millionaire overnight. When news of the gold discovery spread throughout the mining camps in Siberia, several thousand Russians poured into the Jeltuga district at one time. At the height of the gold rush it is said that the Russian and Manchu miners in the region numbered about 10,000. According to historical facts these miners finally took possession of Jeltuga and erecting large and small mining camps, they freed themselves from the jurisdictions of both Russia and China and established the Republic of Jeltuga. There are many stories of this short-lived but highly interesting republic, which add a singular color to Russian literature.

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*Two hundred thousand young men were recruited from the total Manchu population of 1,000,000 for garrisoning duty, and many districts in Manchuria were turned into uninhabited wastes.

A general outline of the development of gold mining in Manchuria, according to districts and gold mines, will next be given.

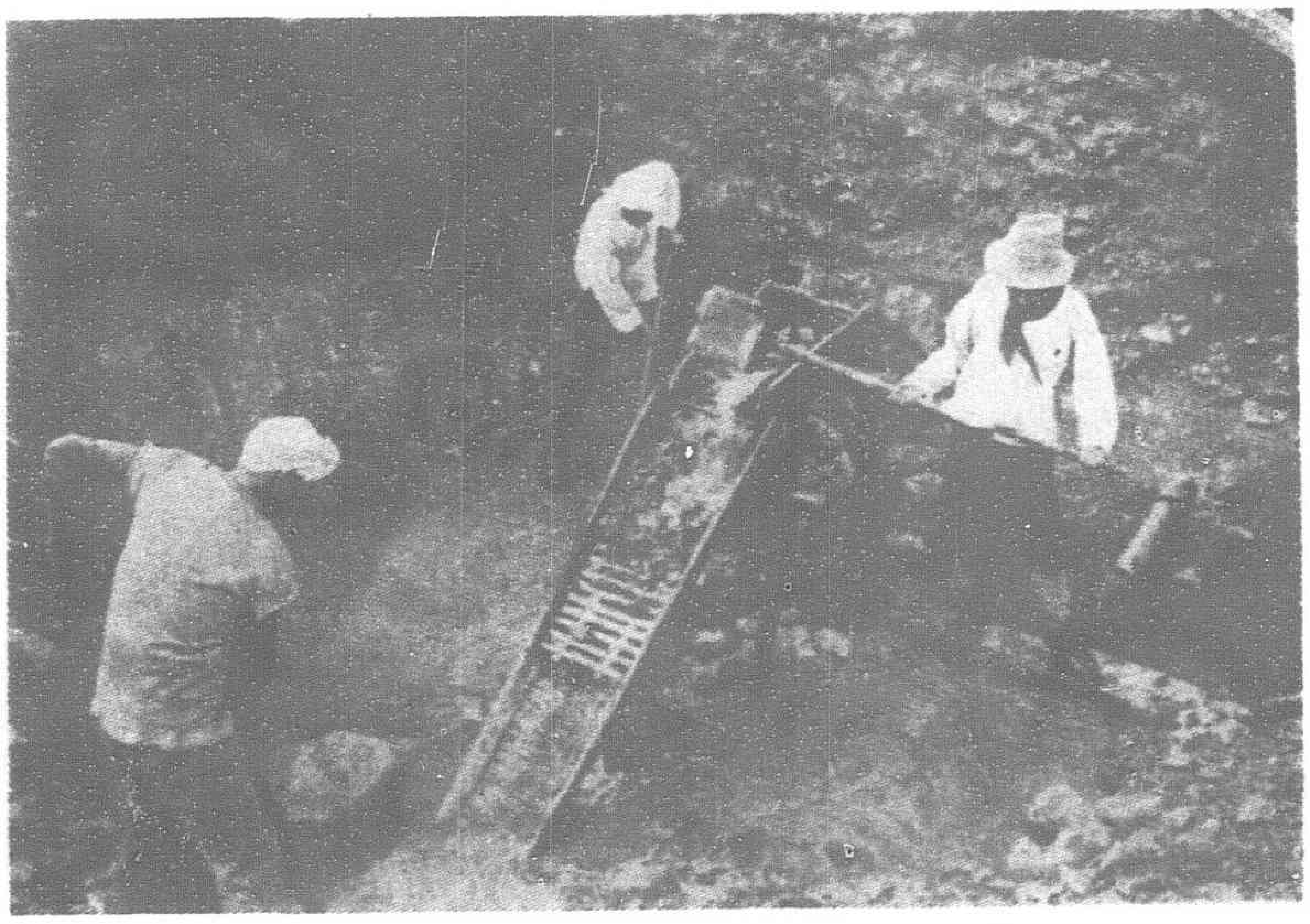
Former Kirin Province

First stage (*Chiapikou period*).—During this period which ranged from about 1820 to 1875, the gold mine at Chiapikou was privately exploited by Chinese on a large scale and a golden age was created for a time.

Second stage (*Chientao Tungkou period*).—Between 1890 or thereabout to 1900 the gold mines in the Chientao district centring about Tungkou, and the mine at Sanhsing in the Sungari river basin were actively worked under the management of the Kirin Provincial Government. Aside from these mines the four mines at Hsinlungkou, Lengshuichuantzu, Wuhulin and Suifen were occupied and exploited secretly by Russians.

Third stage (*Lengshuichuantzu period*).—Anti-foreign feeling became pronounced owing to the outbreak of the Boxer Trouble in 1900, and the Russian miners were driven out from Lengshuichuantzu. The mine there was taken over by the Provincial Government and was actively operated till about 1904.

Fourth stage (*Hsinglungkou period*).—Between 1906 and 1917 the Lengshuichuantzu, Wuhulin, Hsinglungkou and Wanlukou mines were worked under the management of the Provincial Government, and the Suifen mine was operated jointly by Russian and Manchu interests. Of these mines the Hsinglungkou mine was most actively exploited.



Alluvial mining in the Hsingan Mountains

Fifth stage (*Dormant period*).—During the eight years between 1918 and 1924 the disturbances of the Siberian Radical Party had an after-effect on Manchuria. Bandits became rampant in districts along the railway lines and gold mining was brought to a complete standstill.

Sixth stage (*Yenho Lengchuan period*).—After 1925 the mines in the Chientao district were worked by the Yenho Gold Mining Company and those in Muleng-hsien and Huachuan-hsien by the Lengchuan Gold Mining Company. Of these mines those whose operations were continued were the former concern's Pataokou and Pokolatzu mines, and the latter's Chiapikou mine.

Former Heilungkiang Province

First stage (*Moho period*).—Following the discovery of placer gold at Moho by Russians in 1863, many Russians crossed the border after 1875 and engaged in gold mining which was continued up to the dispatch of a punitive expedition against them by the Ching dynasty in 1887.

Second stage (*Chimo period*).—After driving the Russians out from Moho, Chikan and Kuanyinshan, the Provincial Government in 1889 established the Peiyang-Moho Gold Mining Bureau at Moho and the Peiyang-Kuanyinshan Gold Mining Bureau at Kuanyinshan, and brought the gold mining enterprises there under its control. Gold was actively mined up to the time of the Boxer Uprising in 1900. Secret exploitation by the Russians was carried on continuously in many places during this period.

Third stage (*Chilalin period*).—The Russians who had taken possession of various mining districts on the occasion of the Boxer Uprising acquired gold mining rights in Heilungkiang Province in 1901 and openly managed the Chilalin and Kuanyinshan gold mines. The former mine was most actively operated. The Russians also started reopening the Chiapikou mine about this time.

Fourth stage (*Huma and Kuantu period*).—By virtue of the Russo-Chinese Agreement of 1906 China recovered the mining rights from the Russians and brought the Chilalin and Huma mines under the management of the Heilungkiang Provincial Government. In 1911 it took over the Peiyang Mining Bureau's Moho and Kuanyinshan mines and placed them under the management of the Provincial Government. The Huma and the Kuanyinshan mines were actively operated up to the outbreak of the Russian Revolution of 1917.

Fifth stage (*Fengyuan Hsingan period*).—Many Chinese gold miners in the Zeya and Selemdja districts in Russian territory, who sought refuge in Manchuria following their expulsion from the above regions as a result of the revolt of the Siberian Radical Party, discovered placer gold mines in the Fengyuan and Hsingan regions and a golden age was created between 1924 and 1925 in the district centring around Heiho.

Sixth stage (*Dormant period*).—The placer gold bearing districts in North Manchuria, especially in the Amur river basin, were rendered impracticable owing to the disturbance of peace and order resulting from the Russo-Chinese Incident of 1920, and gold mining in North Manchuria remained at a standstill up till recent years.

Present Conditions of Gold Mining

In view of the importance of developing the mineral resources of the country, the Manchoukuo Government promulgated Order No. 75 of the Department of Industry under date of June 30, 1932, announcing nationalization of seven kinds of mining, including gold mining, and made clear its policy to place the mining industry under State control. To meet the new situation thus created the Government on August 1, 1935, promulgated the Mining Law to form a legal framework upon which may be based the national mining policy. Composed of 150 articles, with detailed regulations comprising 79 articles for its enforcement, the new Mining Law (1) abolished former prospecting rights and designated mining rights as operating rights, (2) recognized foreigners and foreign juridical persons becoming holders or lessees* of mining rights upon securing special permission from the Minister of Industry, (3) treated mining rights and leased mining rights as material rights and incorporated them into real estate regulations and (4) stipulated other important policies. The new law is applicable to gold mining as well as all other mining in Manchoukuo.

Following its policy of placing each special enterprise under the management and control of one special corporation, the Manchoukuo Government established the Manchuria Gold Mining Company in May, 1934, and entrusted it with the actual exploitation of gold resources in the country. Capitalized at 12,000,000 yuan jointly invested by the Government, the South Manchuria Railway Company and the Oriental Development Company, it is a special Manchoukuo corporation supervised by the Government. Its chief functions include the prospecting and exploiting of gold deposits, the refining of gold, the advancing of funds and the leasing of mine-lots to those engaged in gold production, the assumption of the management of gold mining enterprises conducted by others, the entrusting of the management of some of its enterprises to others, the lending of mining implements, and the sale and purchase of run-of-mine ores and refined gold. The Company also has the monopoly of establishing gold mining rights within special mining districts. It can also entrust the management of or lease mine-lots not under its direct control to those who are deemed competent. In a word the Manchuria Gold Mining Company, besides directly managing gold mining enterprises and forming the nucleus for controlling the gold mining industry, accords both financial and technical assistance to holders of mining rights, purchases gold on behalf of the Central Bank of Manchu at officially fixed prices, strives to turn produced gold into usable forms such as capital as speedily as possible, and co-operates with private interests in order to promote the development of the gold mining industry.

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*By lessees of mining rights is meant those persons who have acquired the right to mine for minerals from holders of mining rights in their respective mine-lots by paying royalties for such right.

There are nine companies controlled by the Manchuria Gold Mining Company, they being the North Manchuria Gold Mining Company (paid-up capital MY 2,000,000), the Hailar Gold Mining Company (MY 300,000), the Tatung Industry Company (MY.4,000,000), the Yenho Gold Mining Company (MY 600,000), the Jehol Mining Industry Company (MY 300,000), the Daiman Gold Mining Company (MY 50,000), the Jehol Mining Company (MY 600,000), the Manchuria Mining Industry Company (MY 2,500,000), and the Daito Shokusan Company (MY 3,000,000). The combined capital of these corporations and the Manchuria Gold Mining Company totals MY 25,350,000 of which MY 16,500,000 is invested by Japanese interests.

The Manchuria Gold Mining Company has its head office in Hsinking and branches at Heiho, Chiamussu and Yenki, which supervise the business within their respective districts as well as maintaining connections with the mines and survey parties. The Company is at present devoting its greatest efforts to the surveying of gold fields, and ever since it took over the business of the Manchuria Gold Mining Investigation Department specially established in 1933 by the Kwantung Army and the S.M.R. Company, it has been sending annually survey parties into districts where no man has ever set foot before, and has been carrying on extensive investigations in search of gold.

In line with Manchoukuo's Five-Year Industrial Development Program launched last year, the Manchuria Gold Mining Company plans to produce 212,000,000 yuan worth of gold during the same period. The production plan is as follows (in MY 1,000):*

Districts	*1937*	*1938*	*1939*	*1940*	*1941*	*Total*
Heiho	6,460	9,350	15,390	21,830	32,430	85,460
Chiamussu	6,840	10,490	15,830	25,130	37,000	95,290
Hunchun	1,500	2,330	3,500	5,250	7,870	20,450
Chientao (mountain) gold	—	—	1,800	3,600	5,400	10,800
Total	14,800	22,170	36,520	55,810	82,700	212,000

According to recent newspaper reports, the Manchuria Gold Mining Company, in anticipation of execution of the above five-year plan along positive lines, has placed an order for the construction of eight gold dredgers in Japan in order to provide for a large-scale exploitation of North Manchuria placer gold deposits. The same reports state that the Company recently decided to order eight additional ships from Japan. Including two dredgers owned by the Company, its gold mining fleet will be increased to ten within this year and to eighteen at the end of next year. Much is expected of its future operations. The cost of one dredger is approximately 1,000,000 yuan. Adding the cost of bringing one ship to Manchuria and equipment installation cost, the total cost of each ship will be about 1,600,000 yuan. The expenses will be temporarily defrayed from the Company's reserve fund and the MY 4,000,000 loan obtained from the Industrial Bank of Manchu, it being understood that the reported plan of the Company to increase its capital will be held in abeyance for the time being.

Along with the active participation of Japanese capital, gold mining in Manchoukuo, with the Manchuria Gold Mining Company forming the nucleus, has developed into a modern industry and is making marked progress. Gold mining in Antung, Fengtien and Jehol provinces is, however, still inactive, the amount of investments made so far totalling only 7,000,000 yuan.

The exploitation of mountain gold deposits has also been greatly stimulated by the opening of the State Gold Refinery established in accordance with the Organization Law of the State Refinery, promulgated in August, 1936. Sixteen gold mines have been opened since it commenced operations. Gold ore purchased by the Refinery amounted to 2,000 metric tons (average amount of gold in one ton estimated at 27 grammes) in 1936, which reportedly increased to 40,000 metric tons in 1937.

Future of Gold Mining

Despite the importance of exploiting the gold resources of Manchuria, the development of gold mining has hitherto been hindered by various adverse factors among which may be counted the disturbance of peace and order, the defective means of communication, inadequate financing, unprofitable results, and defects in mining regulations.

In looking over the impedimental factors mentioned in reports made by mining experts in various parts of the country, it is commonly agreed that the disturbance of public peace, the inconvenience in acquiring motive power, and the shortage of technical mining experts constitute the chief obstacles in the way of the development of gold mining, while the following are pointed out as problems of a local nature:

(1) Heiho region—the obsolete condition of gold dredgers.
(2) Chiamussu region—the lack of investigation materials, the delay in the construction of gold dredgers, and the shortage of gold miners.
(3) Hunchun region—insufficient water supply for hydraulic mining and damages caused by floods.

In generalizing the various factors stated above, the lack of funds is considered to be the primary cause of retarding the development of gold mining in Manchuria. The important position which the industry occupies in national economy has already been mentioned at the beginning of this article. It is believed that Manchoukuo, in abolishing silver as the basis for currency circulation and linking the national currency with the Japanese gold yen, has come to feel increasingly the need for strengthening the gold reserve. Inasmuch as the scale of the development of gold mining must be decided upon by estimating the limit of investment in comparison with other industries, from a general social and economic standpoint, the improvement of technical defects on the part of the gold mining enterprises, the rationalization of management, and the execution of thorough prospecting for gold are prerequisites for the solution of this problem and are highly indispensable to inducing investments in the gold mining industry. The reorganization of the Manchuria Gold Mining Company has recently been discussed in newspapers in the following vein, which, it may be asserted, is one manifestation of the need for the desirable conditions stated above.

It appears that the Manchoukuo Government, as a result of re-examination of its gold mining policy hitherto pursued in accordance with State rationalization of the industry, has the intention to reorganize the Manchuria Gold Mining Company parallel with the reorganization and expansion of the Manchuria Mining Development Company, a subsidiary of the Manchuria Heavy Industry Development Company, in the near future. The Government designated eighty-eight hsien and eleven banners in ten provinces, the total area of which reaching some 900,000 square kilometers comprises almost all the principal gold producing districts in the country, as the sphere of operations of the Manchuria Gold Mining Company, and granted to it sole mining rights within these districts in order to control the gold mining industry. It is said that the first motive which prompted the Government to take such a step as to form this special system was the preservation of mining rights in the former Kirin and Heilungkiang provinces based on the Nishihara Loans.

Regarding the relation between the special districts controlled by the Manchuria Gold Mining Company and general gold mining enterprises, the Manchoukuo Government, by Imperial Ordinance No. 106 promulgated in 1935, gave general gold mining enterprises room for operations by appropriately granting them leased mining rights and mining contracts in regions excepting a number of districts retained by the Manchuria Gold Mining Company. At the present day when the political and economic structures of the nation have been readjusted, the preservation of resources and mining rights matters very little and the Manchuria Gold Mining Company's monopoly of gold mining at times impedes rather than expedite

(Continued on page 41)

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*Only the districts exploited by the Manchuria Gold Mining Company are listed in the table.

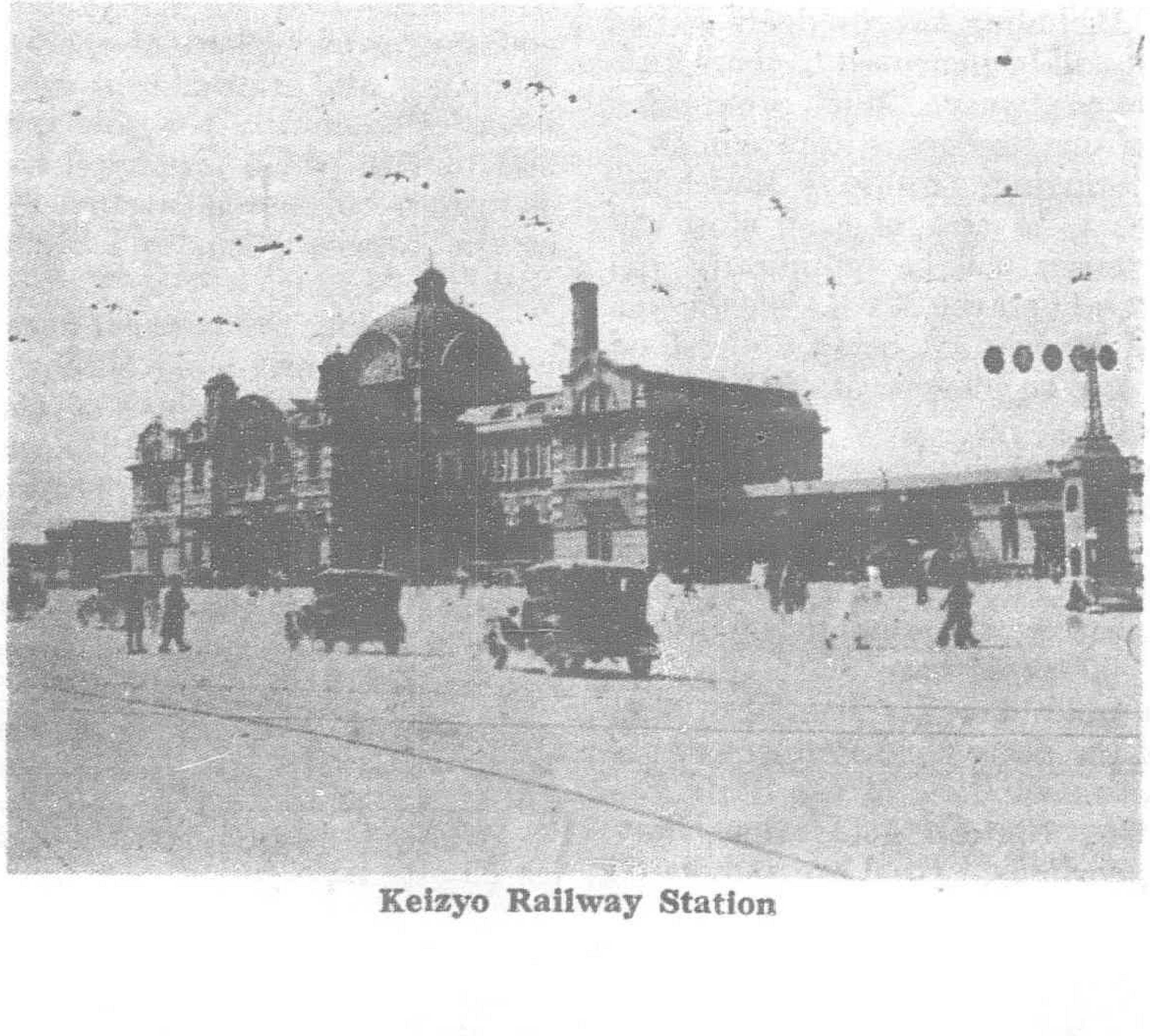
Progress in Korea

In old Korea with all its civilization good roads were entirely lacking, and what roads it possessed were usually left in a state of utter disrepair. Even the "grand highway" from Keizyo to the Chinese border was barely grand enough to admit of a cart being driven along it, so what the rest were like can easily be imagined. It is true the Korean Government used to allot certain sums of money to the various districts for purposes of road repair, but much of this, it is said, went into the pockets of the local magistrates, and practically nothing was done to the roads. On the country being brought under Japanese management, great efforts were consequently put forth to improve this backward condition, and it was planned to construct a regular network of roads of three classes, of which the first and second classes were to be looked after by the Government itself, and the third by the provinces, while in urban districts all classes were to be under municipal control.

When repairs were undertaken in former times, corvée or compulsory service was always used and this was continued even into the new regime by conscripting those persons unable to pay their assessment. In addition, the land owners were often induced to surrender land for roads free of cost. In 1919 it was decided that in the making of roads at national expense corvée should be dispensed with, and the land needed purchased at a fair price, though in the case of roads at provincial cost the old practice was still retained in force in consideration of their special connection with local interests.

In the construction of roads the Government ruled that first class roads were to be seven meters or more in width, second class 5.5, and third class 4. Execution of the first program took seven years and was completed in 1917 at a cost of Y10,000,000. It comprised 34 highways measuring 1,700 miles, and the building of an iron bridge over the Kan-ko. For the second program the construction of 26 highways, some 1,200 miles in length, was projected at an estimate of Y7,500,000 spread over six years, from 1917 to 1922. Owing to the rise in price of material and labor, the original estimates were doubled, and further augmented by the inclusion of an additional sum of Y.12,000,000 for frontier roads and bridges, the period of construction being extended by another six years. In 1926 enlargement of the scheme with an additional appropriation of Y5,600,000 was made and the period for completion was extended to 1935.

By a further change this additional appropriation has been increased to Y34,760,000 and at present work is being carried on to finish by 1938 the frontier roads and bridges under this new plan which includes the special sum of Y3,640,000 added in 1935 for building bridges across the Yalu and Tumen Rivers and it is hoped that in seven years, these new bridges will be open for traffic between Korea and Manchoukuo.



Keizyo Railway Station

To facilitate the exploitation of the natural resources in the upper basins of the Yalu and Tumen rivers, another important work was started in 1932 to be completed in twenty-two years. The total appropriation of Y8,380,000 will provide 666 kilometers of second class roads and 299 kilometers of third class roads.

In addition to the road construction plan the Government-General grants annual subsidies of Y100,000 to Y400,000 to the provincial governments for the improvement of first and second class roads and the local governments from their own resources or by corvée improve third class roads. Up to 1930, 4,786 kilometers of first and second class roads, and 8,557 kilometers of third class roads were improved by this plan and the subsidies granted by the national treasury amounted to Y6,190,000. Of these subsidies Y1,816,000 was used in drought and storm relief. Since 1931 the Government-General began road improvement work to relieve the poor and unemployed specially in the agricultural districts, appropriating the sum of Y33,894 000 for this purpose. In addition, since 1932, the Government-General has set aside a further emergency relief fund of Y2,012,000, to provide work for the poor and unemployed. They are improving at first, second class roads and roads leading to gold mines and forests of which 175 kilometers have been repaired, and the Government-General has granted Y1,058,000 to aid the improvement of third class roads, so that a total of 20,000 kilometers is now open for automobile service.

According to the latest returns the length of roads already constructed is 11,763 km. of first and second class roads and 11,437 km. of third class roads, or 89 and 78 per cent of the length determined for the projected network. With the steady improvement of the highway system automobile services in the country have rapidly increased and nearly every local center is now connected with one or other of the principal towns.

Street Improvements

In view of the growing need for traffic facilities in urban areas street improvement or reconstruction has been extensively undertaken under the present regime, beginning with Keizyo, where it was conducted at national expense to set an example to other towns, and 13 streets selected for improvement were reconstructed at a cost of Y3,000,000 from 1911 to 1918. The most important of these were made 12 to 19 ken in width and provided with sidewalks, and where traffic is heaviest the road surface is tar-macadamized or asphalted, thus adding to the modern aspect of the city. The second program, spread over six years from 1919, comprised 12 streets, of which nine were completed by 1928 at a cost of Y2,990,000.

Since 1929, the Keizyohu (Keizyo Municipality) added two more streets to the general plan and began to improve five important streets in the city at an expense of Y275,000 (including national subsidy Y110,000). The Keizyohu expended Y3,065,000 (including national subsidy Y1,520,000) from 1930 to 1935 for continuing the work.

Up to the year 1932 the streets in Keizyo were further improved. The new road between the main-gate of the East Palace to the Keizyo University Hospital—685.5 meters long was completed thus adding one more step in the beautifying of the city and for the convenience of traffic. The expense for this work was Y425,000.

The road around Shoro (Bell Street) in Keijo has been paved and the street leading to East Gate reconstructed at an expense of Y615,000. The total length of that street is 1,203.5 meters, and the reconstruction work is completed.

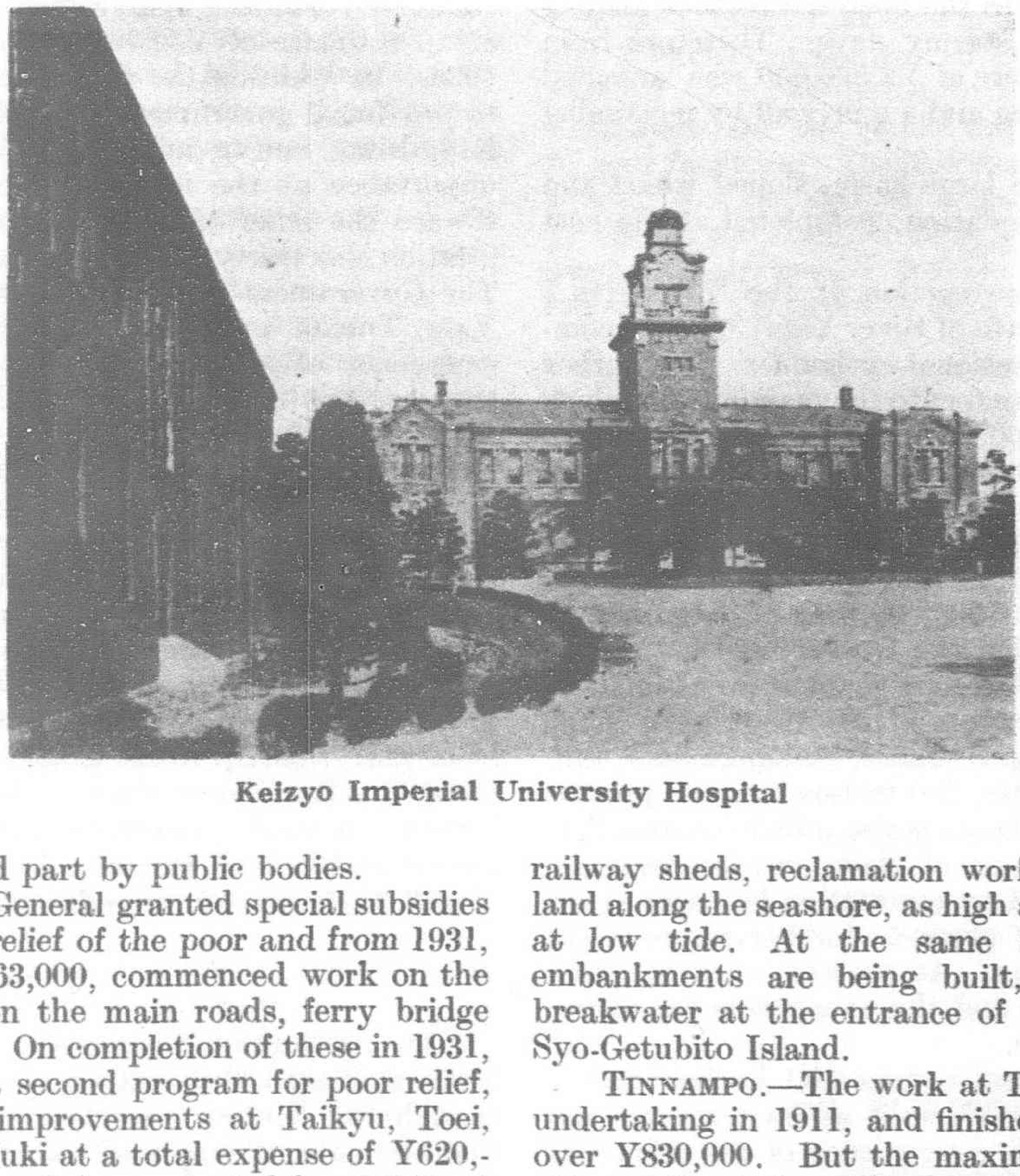
On the enlargement of the administrative districts of Keizyohu in April 1936, completion of the main streets became urgent and plans were made for 220 projected streets one 50 meters wide and the others ranging between 34 and 12 meters.

In urban districts work started in Kaizyo, Heizyo, Taikyu, Husan, Singisyu, Tinnampo, Seisin, Moppo, Genzan, Sinsyu, Kanko, Rasin and other towns at national expense or with subsidies from the national treasury. These however were only urgent measures, and the improvements were far from perfect. Modern Korea presents the same tendency of "city concentration" as does Japan Proper. Since annexation various factories have sprung up in towns to meet the demands of the new age. As a result the towns have been extending in irregular forms and unless the Government established a definite system governing the streets and controlling the erection of buildings it was clear that difficulties would continue long in the future.

Therefore the Government-General drafted an Act governing *City Planning* in 1921, but owing to the conditions of the people, the time was considered premature for enforcement. However, after the lapse of several years of patiently watching the general tendency, and because of the growing demand, it was decided to hasten the enforcement of the plan. Accordingly the Government-General, after further careful consideration and investigation prepared an Ordinance for Street Planning and promulgated it in June 1934. The Ordinance follows the spirit of the law for City Planning in Japan Proper and aims both at the improvement and enlargement of the streets already made and at the construction of new streets. Up to the present time this Ordinance has been enforced in Keizyo, Seisin, Rasin and Zyosin.

In addition to the street planning above mentioned, the Government-General, having in view the necessity of perfecting city plans, decided to encourage the local authorities to lay out, in the suburbs, sections for the formation of new streets; and for that purpose the Government-General gave orders in November 1934 to the authorities at Rasin. In compliance with this order, work is now being carried out in the suburbs of that city on an area of three million square meters, at an expense of Y2,145,000. The Government-General also gave orders to the authorities at Seisin and Zyosin, Keizyo, Heizyo, Kanko for the same purpose, and at present those cities are making preparations to carry out the Government orders.

A complete sewerage system, as an aid to street sanitation, is still lacking in most places, so efforts are being made for its arrangement side by side with street improvement in the large towns, which are first to feel such necessity. On such work nine towns have already gone to considerable expense, the largest among them being Keizyo, Heizyo and Kunsan. Part of the cost of construction is provided by the national treasury and part by public bodies.



Keizyo Imperial University Hospital

In addition, the Government-General granted special subsidies to civil engineering works for the relief of the poor and from 1931, with a total appropriation of Y3,763,000, commenced work on the streets at Singisyu and Reisui; on the main roads, ferry bridge and fishing boat shelter at Husan. On completion of these in 1931, the Government at once started a second program for poor relief, undertaking street and drainage improvements at Taikyu, Toei, Heizyo, Tinnampo, Singisyu and Yuki at a total expense of Y620,000. The third program for poor relief was started from 1935 at a total estimate of Y440,000.

Harbor Improvements

Harbor improvement was first undertaken in 11 important ports during the protectorate. While work was still going on, annexation took place, in consequence of which all these works were taken over by the present Government and vigorously pursued on a far bigger scale. To keep pace with the rapid development of trade in recent years, the Government-General began construction works from 1935 on No. 2 Dock in Zinsen and breakwaters in Husan and Reisui. The Government-General also undertook the second period works in the fishing harbor of Seisin, and started improvement work in the port of Yuki.

HUSAN.—Husan was the first port selected for development up to a maximum capacity of 700,000 tons a year, and this was completed in 1918 at the cost of Y3,800,000. Direct connection was then made between the trunk railway line and the Simonoseki-Husan ferry service. However, trade through the port showing every sign of great increase, enlargement of the jetties, construction of a breakwater and dredging of the harbor to provide a more spacious anchorage were started at the estimated cost of Y9,000,000 and completed in 1928. In July, 1930, disastrous typhoons struck the Husan harbor, leaving in their train terrible damages on the pier, embankment works and landing places. The damages inflicted on ships and lives were beyond description. For the purpose of preventing such catastrophe in the future, the Government-General commenced the construction of a breakwater on the northern side of the harbor at a cost of two million yen; this work began in 1935, and is to be completed within five years.

The tonnage handled at this harbor increases year by year, so that the present equipment is inadequate. From 1936, operations to continue for eight years at a total of Y18,000,000 were started to reclaim 711,000 sq. meters of sea front, to provide for the construction of a new pier with a freight capacity of a million tons, and berths for the ferryboats.

ZINSEN.—The work at Zinsen was undertaken to provide the port with a lock-gate dock, to accommodate with ease three boats of the 4,000 ton class along one side of it. A dock of this kind was sorely needed because of the great tidal range reaching 30 feet. Construction of it was started in 1911 at the estimated cost of some Y7,000,000 and completed in 1923. Extension work on a pier and dock to accommodate four boats of 2,000 tons alongside, at the cost of Y1,400,000, was commenced in 1929 and finished in 1934. In view of the rapidly growing trade and of the ever increasing quantity of freight passing through the harbor, the present equipment is found inadequate. To meet the demand of the times, the Government-General made an appropriation for Y9,220,000, under a nine year plan beginning with 1935, and started constructing a new double lock-gate dock adjoining the old one, together with a quay inside the dock large enough to accommodate five ships of three to eight thousand ton class. In addition, two landing places are being built for the convenience of small ships and cargo-boats. For the purpose of making roads and railway sheds, reclamation work is progressing on a vast tract of land along the seashore, as high as ten meters above the seabottom at low tide. At the same time two sand drift prevention embankments are being built, one at the end of the present breakwater at the entrance of the harbor and another near the Syo-Getubito Island.

TINNAMPO.—The work at Tinnampo was begun as a four-year undertaking in 1911, and finished as planned in 1914 at a cost of over Y830,000. But the maximum difference of 24 feet between ebb and flow being still a source of trouble in unloading, this difficulty is still claiming the attention of authorities. Since 1929 extension work of this harbor has been under construction on the side opposite the old quaywall. It was completed at the cost of Y2,700,000 in 1934.

KUNSAN.—The harbor work at Kunsan was started at the estimated cost of Y2,850,000 in 1926 and completed in 1933. Floating pontoons as quays were adopted to moor 3,000 ton steamships in order to avoid the difficulties due to the tidal range of 21-ft.

MOPPO.—The work at Moppo harbor was accomplished at the cost of Y600,000 in 1933. Three pontoons were provided as a quay for 2,000 ton steamships for the same reason as at Kunsan harbor.

GENSAN.—The works at Gensan were started as a seven year enterprise from 1915 at an estimate of Y2,640,000 and finished in 1922, but the need for extension of the land equipments called for the expenditure of an additional Y850,000 and the work saw completion in 1927.

Seisin.—The harbor works at Seisin are destined to play an important part in the development of North Tyosen. They were started at the estimated cost of Y6,559,000 in 1926. There are a great breakwater of 600 m. in length, two quays for accommodating seven ships of three to six thousand tons and other customs accommodation finished in 1935.

Moreover, for the equipment of a fishing harbor, a four year plan at an estimate of Y1,380,000 was put into operation since 1933. The plan is to provide a great shelter for fishing boats in the port by building a breakwater at the mouth of a river in the town.

Zyosin.—In 1909 the Korean Government undertook reclamation on the foreshore for the customs accommodation and started the construction of the Custom House, shed, warehouse, a landing jetty 100 meters long and a breakwater 160 meters long. These works were completed in 1911 at a cost of Y48,000. But this plan was too small. So from 1922 additional work was started and finished in 1927 to provide customs facilities by the construction of a 205 meter breakwater and a 180 meter sanddrift prevention jetty, which thus afforded an anchorage space of 52,000 sq. meters for sea-going steamers at a cost of Y340,000. To facilitate the storage of timber which arrives at Zyosin in large quantities from the interior forest regions, work on reclamation at the river mouth, and on the construction of a breakwater and a sanddrift prevention jetty to accommodate a vast rafting station on the water, with lumber storage on land was completed in 1934.

As a distributing center for goods for North Tyosen and Manchoukuo, this harbor has made remarkable progress in recent years. The anchorage, however is exposed to the open sea so that loading and discharging are impossible on stormy days. Therefore from 1936, a five year plan at an expenditure of Y2,596,000 was launched to build a breakwater 580 meters long and a quaywall by reclaiming 74,000 sq. meters.

Yuki.—The Yuki harbor has a large basin, sloped wharf and one shed as the Customs accommodation, completed at the cost of Y1,000,000 in 1932.

Tasarugi.—A new harbor construction at the " Tasarugi " Anchorage (an island lying at the mouth of River Yalu) has been completed at a cost of Y500,000 to the national exchequer. The harbor is joined by an embankment of 600 meters to the mainland by which connection is made with Ryugampo (Yongampo) and Singisyu.

It is the only anchorage there not closed by ice in winter, and it is not only the distributing center for goods along the Yalu basin, but also the terminus of the trunk line connecting with Manchoukuo, and has an important future. When the railway connecting Tasarugi with Singisyu is completed, about 500,000 tons of cargo will be handled. To meet this new situation the Government-General in 1936, started work, to be completed in four years at an estimate of Y1018,000, to reclaim 33,000 sq. meters of sea front near Small Tasarugi Island, for landing space and cranes, embankments, railways, and warehouses. A breakwater, 200 meters long, to provide a 39,000 sq. meter shelter for small boats is also under construction.

In view of the rapid development of trade and industry and the requirements of speedy means of transportation in recent years, the Government-General is making plans to further improve the harbors at Singisyu and Ryugampo. At present work is under way with the building of moorings and the excavation for waterways at an estimate of Y1,060,000.

Reisui.—This is one of the best commercial harbors in the South. The South Tyosen Railway chose it as its terminus and built a quay in March 1931 for the convenience of the ferryboat service between Reisui and Simonoseki. But as the southern entrance of the harbor is exposed to wind and sea it was unsafe for ships to sail or to stay. To remedy this defect a breakwater construction work was commenced from 1935 under a five year plan at an estimate of Y2,400,000. In 1936 Y500,000 was added to the original budget to carry the work into greater perfection by connecting the proposed breakwater to Godoto (the " Paulownia" Island) nearby.

Masan.—Situated at the head of Tinkai Bay, surrounded by land, with calm water in all seasons, this is an excellent harbor. As the terminus of the Kunsan-Masan Railway the volume of trade increases year by year. The existing wooden pier built under the Korean regime is far from sufficient to meet present requirements. From 1936, therefore, a three year reclamation work started on 150,000 sq. meters on the sea coast in front of the Masan Railway Station. An electric crane is being erected and the whole is estimated to cost Y1,091,000.

In addition to the ports open to foreign trade there are over three hundred coastal shipping and fishing boat shelters which, however, owing to the lack of engineering works, have been exposed to frequent storms. Since 1912 the Government-General has been paying subsidies for the improvement of accommodation in the more important of such harbors. Recently, as part of the work for Relief of the Poor from 1931, Y2,641,000 has been expended to improve eleven fishing harbors and from 1932 an additional 628,000 was supplied to increase this number by eight more similar harbors. From 1934 the improvement of fifteen more was started at a total estimate of Y2,039,000 under the Civil Engineering Poor Relief program. In 1935, repair works started at Seikosin fishing harbor financed by a third program for Poor Relief and in 1936 repairs commenced at Kyobunto (Port Hamilton) and four other harbors under local revival plans.

River Improvements

The large rivers, such as the Daido-ko, Kan-ko, Kin-ko, Rakuto-ko, are of great value to traffic though they have not yet been utilized to their fullest extent. On the other hand, their inundation, an almost yearly event, results in more or less damage being done to the lands traversed by them, mainly because little has ever been done to keep them within proper bounds, and also because the precious forests at one time bordering them have been cut down regardless of resultant evils. Serious attention is being paid to river conservation, and survey of eleven large rivers has been completed resulting in an eleven-year program, covering six of them at an estimate of Y52,700,000, started in 1925 to be finished by 1938. In addition the Government-General has granted subsidies to provincial governments from 1931 to 1934 to improve the Kan, Kin, Biko, Suigen and eighty other rivers and streams of local importance as the first and second programs of civil engineering toward the relief of the poor and unemployed. The total appropriation was thirty million yen and the work has now been finished. The Government-General also undertook the improvements of the Yalu, Tumen and five other rivers under its direct control as an emergency measure. The total appropriation, one and half million yen was paid from the national exchequer and the work is now completed. In 1936, under the local revival plan, the Biko, Kin, Dainei and other rivers were further improved, under direct control of the Government-General.

Damage by floods, in the central and southern parts of the country caused by the excessive rainfall in the summer of 1936, was more extensive even than in 1925 1933, or 1934.

As radical counter-measures had become essential, in October 1936 a River Improvement Investigation Committee was convened in the Government-General, by which plans were decided to hasten from 1937, riparian works along the Rakuto River, protective works along the East Coast Railway line, and works to restore demaged forests. A total appropriation of Y78,320,000 for this purpose was passed at the 70th Imperial Diet, making possible the restoration of 230,000 tyobu devastated by floods.

Waterworks

Owing to the nature of the soil Korean water is generally very hard, and even the well-water is found in many cases not good enough for drinking purposes. Moreover, it not seldom happens that the natural supply of water runs short, especially in the large towns. To meet this danger the authorities are encouraging the construction of modern waterworks wherever possible.

The only cities possessed of waterworks in pre-annexation days were Keizyo, Heizyo, Husan and Moppo, but now the number of towns so provided has risen to 68 (including those not quite completed). In the establishment and operation both Government and local public bodies took part, but in March, 1922, the Government transferred the waterworks run by it to the respective towns, though in the case of new construction financial help is still given in proportion to the need, ranging from 30 per cent to 50 per cent of the actual cost.

The building or enlargement of waterworks at Kaizyo and twenty-five other places started in 1931 at a total estimate of Y3,700,000 partly provided under subsidies for Poor Relief. In 1936, under the local revival plan, waterworks are being constructed at Tenan and seven other places at an expenditure of Y610,000 with a national subsidy of Y145,000.

Public Buildings

At first most of the public offices in the country were housed in the old native buildings, so the Government annually spent two to three million yen in constructing new buildings, but after the year 1920 the budget estimates for buildings were more than doubled owing to expansion in the various public undertakings, including the erection of new Government-General Offices, the Tyosen Jingu, Keizyo University, etc.

The new edifice for the Government-General is situated in the grounds of Keifuku or North Palace, Keijo, and is a five-storey one of granite and ferro-concrete in modern Renaissance style, covering a floor area of 1,115 tsubo. The work was started in 1916 as a ten-year enterprise at an estimate of three million yen, but the subsequent rise in the price of material and wages more than doubled the cost as originally estimated. In January, 1926, the Government entered its new home. Caused by the expansion of various administrative equipments and the increase of business, the original offices are now overcrowded, and an extension was commenced in 1936, in the rear of the main building, to be completed in 1938 at an estimate of Y273,000.

The Tyosen Jingu as the center for national ceremonies, stands on Nansan or South Hill, Keijo, commanding a fine view of the country around. The work was begun with a ceremonial purification of the site in May, 1920, at an estimated expenditure of Y1,500,000 and was completed as arranged in October, 1925.

The establishment of Keizyo Imperial University as the coping-stone of all educational institutions in the country was begun in 1924 as a four-year enterprise at an estimated cost of Y1,668,000. It is situated in the north-east of the city and the buildings include library, main hall, and class-rooms for the several departments. During 1935-1936 the Medical School buildings were extended at a cost of Y161,000.

The new building for law courts in Keizyo including the Local Court, Court of Appeal, and Supreme Court, was started in 1926 as a three-year enterprise at an estimate of Y600,000.

Some of the other new public buildings have been :

Government Normal Schools at Keizyo, Heizyo and Taikyu started in 1929 and completed in 1932 at a cost of Y333,000. New buildings for two more normal schools at Zensyu and Kanko started in 1936 to be completed in 1938 at a cost of Y306,000.

Commercial Museum on Nandaimon Square, Keizyo, begun in 1928 and completed in 1929 at a cost of Y157,000. The purpose of this Museum is to aid industrial development by the exhibition of Korean products and by the issue of information regarding them abroad.

Fresh Water Fish Farm in Tinkai: Tinkai was selected for the location of this work and a breeding pond, reservoir, laboratory and the necessary accessory buildings were built in 1927-1928 at a cost of Y100,000. There are many ponds and dams in Tyosen suitable for the culture of fresh water fish, and the Government-General considers it urgent that these should be utilized for the breeding and distribution of young fish to create a healthy development of this industry.

Provincial Office of South Tyusei Province at Taiden begun in 1931 and completed in 1932 at a cost of Y358,000.

South Kankyo Provincial Government Offices at Kanko : The old offices are 300 years old and are still in use by the Provincial. The erection of a new building was started in 1933 and was finished in December 1935 at a cost of Y260,000. In 1936 a Conference Room was finished at a cost of Y45,000.

Keizyo Prison begun 1931 and completed in 1933 at a cost of Y390,000.

Hospital attached to Keizyo Medical College (Isen Byoin) begun 1931 and completed in 1933 with the latest modern equipment at a cost of Y293,000.

Government-General Museum : A new building for the museum has been planned as a memorial of the Twenty-fifth Anniversary of the Tyosen Administration. The building will be finished in three years from 1935 at a cost of two million yen. The site of the new building has already been selected in the North Palace (Keifuku Palace) grounds in Keizyo and designs are now desired from the general public in a prize contest.

Juvenile Prison at Zinsen : With a view to meet the lack of accommodation for boy prisoners in the existing buildings at Kaizyo and Kinsen, the Government-General started the construction of a new juvenile prison at Zinsen in 1935 to be completed in three years at a cost of Y300,000, for youths who have completed the third year in primary schools or an equivalent grade.

Suigen Higher Agricultural-Dendrological School : The original building was erected in 1906 under the former Korean regime. A new building to replace it was commenced in 1936 under an appropriation of Y237,000.

Monopoly Bureau : The main offices have been housed in the old small Commercial Museum in the southern part of Keizyo, a portion of which has to be demolished for street improvement. The Government-General has now made plans to erect a new building at a cost of Y238,000 to be completed in three years commencing in 1936.

A new building for a Cigarette Factory at Heizyo was begun in 1936 at an estimate of Y285,000, to meet the increased demand.

Electricity in Japan

(Continued from page 33)

Progress has since been notable. Member stations had increased to 30 by the end of 1936, having 113.7 kilowatts of antenna capacity in all, in 5,259 km. of relay cables connecting them.

The number of listeners-in, though only 5,434 when the Tokyo Broadcasting Station commenced its business, has since increased at a great pace, reaching 50,000 in September, 1928 ; 1,000,000 in February, 1932 ; 1,500,000 in June, 1933 ; 2,000,000 in April, 1935 ; and 3,500,000 at the end of 1937. The last figure corresponds to 40.4 per 1,000 population, or 20.5 per cent of the total households. Encouraged by the public enthusiasm, many stations are adding to their facilities. The Tokyo station, known as JOAK, is building a new plant the antenna capacity of which is to be 150 kilowatts.

Short wavelengths are being used for relaying and broadcasting purposes, particularly for the benefit of overseas listeners. The following is the overseas broadcast schedule, Tokyo Time :

OVERSEAS BROADCAST SCHEDULE

	(Tokyo Time)		Language
(1) To Europe	4.30 a.m. daily	one hour and half	Japanese English German French
(2) South America and Eastern Part of North America ..	6.30 a.m. daily	one hour	Japanese Spanish Portuguese
(3) Straits Settlements and Java	10.00 p.m. daily	one hour and half	Japanese English Chinese French
(4) North America (Western Part) and Hawaii	2.30 p.m. daily	one hour	Japanese English
(5) To Eastern Part of North America	8.00 a.m. 9.00 p.m. daily	half an hour	Japanese English

Gold Mining in Manchoukuo

(Continued from page 37)

free enterprising. It is thus the plan of the Government to reorganize the Company into a purely business enterprise by transferring its mining rights to the Manchuria Mining Development Company, which will lease such rights to the former concern.

At any rate the desire at home and abroad to engage in gold mining in Manchoukuo is exceedingly strong and is growing daily. Especially the number of claims of gold discoveries has increased to such an extent* as was never witnessed before the foundation of the new State. It is an established fact that actual production under the five-year plan will surpass the projected amount, it being anticipated that total output will exceed 300,000,000 yuan. A bright future is thus in store for the gold mining industry in Manchoukuo.

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*Forty-eight claims were filed in 1935 and although the number filed in 1936 is unknown, it is believed to be greater than the 1935 figure.

Engineering Notes

INDUSTRIAL

NEW PAPER PLANT :—A new large-scale paper manufactory is being planned for Kunming, Yunnan, under the joint auspices of Messrs. Tu Yueh-sen, Chairman of the Board of Directors of the Chung Wai Bank, Shanghai, and Y. M. Chien, Chairman of the Board of Directors of the Bank of Communications, says the *Yi Pao.*

BUYS JAPANESE SILK :—The British Government are buying large quantities of silk to make balloons for the balloon barrage, but it is coming mostly from Japan. The Japanese are landing silk in the loom state at 2s. a yard (after paying duty), which is well below cost of production here. French silk is also being bought in large quantities.

IRON WORKS OPENS :—The 200-ton furnace in the Shihchingshan iron works was put in operation with due ceremony, marking an epoch in the development of North China. The fire was lighted in the furnace by Hachisaburo Hirao, highest economic adviser to the Japanese armies in North China. For the time being, the furnace will daily turn out 150 tons of pig iron.

ALUMINIUM PLANT :—The Manchuria Light Metals Manufacturing Company recently decided to form an aluminium company in the industrial district in the vicinity of Santaolangtou. Already purchasing an area of 2,400,000 square meters for the construction of a factory, the Manchuria Light Metals Manufacturing Company is reportedly planning to start construction work from next spring.

MENACES JAPANESE TRADE :—American manufacturers of silk stockings predicted that the plans of the Celanese Corporation of America for a £2,000,000 factory at Pearlsburg,Virginia, would cause a major unheaval in the economic position of Japan by seriously damaging that country's market in the United States for raw silk. The projected factory will produce a new synthetic yarn which can be put to a variety of uses in the manufacture of textiles, but which, it is believed, will prove especially suitable for stockings. A similar yarn will be produced in large quantities at the £1,400,000 factory which the Dupont Co. is building at Seaford, Delaware. It is pointed out that from the £20,000,000 worth of raw silk imported annually by the United States, 90 per cent of which comes from Japan, about £15,000,000 worth is used for hosiery.

MINING

"TREASURE ISLAND" :—A "treasure island" has been found in Urup, an island in the middle of the Kurile archipelago, according to the *Asahi Shimbun* which reports that three mining experts sent by the Government have returned from a two-month exploration of the 80 kilometer round island, with specimens of ore which the journal understands contains a high percentage of copper, and gold. The *Asahi* continues that another large-scale exploration will be made in Urup next Spring.

FINDS COAL VEIN :—Discovery of a rich coal vein by a Japanese army officer at a point 45 kilometers east of Wuchang to-day led to a technical investigation. A stratum of good quality coal, fully one meter in depth, was found by engineers. The officer who made the discovery was found to have a knowledge of mineralogy, having been formerly assigned to the Mitsui Engineering School as a military training instructor. An average of 200 tons a day is said to be available from the mine, according to the investigations made thus far.

CHINESE COAL :—The Chinese Government is organizing new coal mining companies and enlarging old companies in Szechuen province, following the removal of factories from coastal cities to the interior, according to an announcement by the spokesman of the Ministry of Economic Affairs. The spokesman declares that the probable coal reserve of China is estimated, by national geological survey at 246,086,000,000 tons; with 9,874,000,000 tons in Szechuen. During the past few years, the average production is estimated at 1,200,000 tons in Szechuen. The new mines will produce 500,000 tons a year, while coal production in Szechuen is expected to reach 2,000,000 tons next year.

TANTALUM IN KOREA :—The discovery of a tantalum deposit, estimated at some 200 tons, is reported at Mt. Ginkokushu, Ginsoto Gainammen, Saku-shu, Heian Hokudo, Chosen. Tantalum, one of the rarest metals, the world output of which is only some 400 tons annually, is used as a substitute for platinum or for rare metal alloys. There having been no tantalum deposits in Japan hitherto, the country has been entirely dependent on imports. Upon receipt of the report of the discovery, director Yoshiteru Kogane of the bureau of mines of the Commerce Office declared that if the report is correct, the discovery of the tantalum deposit would be "big news." Further he said he would dispatch a party of mining engineers.

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